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My hope is that by offering this transcription – however accurate it may be done by a machine learning/ AI – will help you, the listener. I'd love to offer full, proper transcription some day, but that is not feasible at this time. Thank you for listening and reading. I hope you enjoy the show and that this document was helpful. Enjoy.

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Hello everybody and welcome to the max frequency podcast.

I'm your host max roberts and joining me this time It's mark triforme duttleson from my life in gaming mark.

Hello.

How are you?

Hey, you're doing pretty good.

Thanks for having me.

Oh, of course.

Thank you for coming on the show with me It's a huge it's a huge honor.

I've I've been watching my life in gaming for nine years now Which feels that's a long time.

That's about as long as it's been up because The 10th anniversary of the channel is actually this coming October 1st.

- You guys do anything for it?

On a special stream or anything?

You should celebrate.

- I know.

I mean, we have been thinking about doing, I mean, I know videos have been a bit slow this year, and we are, we're kind of, we kindly finally got a lot of things off our plate that is going to allow us to really get back on track.

We are talking about maybe doing sort of a quick fun video to maybe sort of celebrate ten years.

We'll see what happens, but we sort of have an idea at least.

I love to hear that.

I found the channel, I think like most folks, or maybe not, I don't know.

I don't know how the YouTube algorithm works.

I found the channel because of a Kotaku article nine years ago, which dropped like four days after something, the original RGB 101.

And I think like most people who watched RGB 101, learned about the Framemeister, and respectively had their minds blown, that an NES could produce razors sharp pixels like that.

It was always a blurry mess until I found out through every, upscalers and all that stuff through you guys.

That's when I learned about it, which would have been like August, actually probably nine years ago this week roughly, I think is probably when the article went up.

- I do believe it was August 'cause it was just a bit shy of one year of the channel.

- It was August 26th of 2014 was the article.

- I just pulled it up.

Yeah, we're like right in the ballpark.

- We're right there, yeah.

I mean, we've definitely kind of become known as a tech channel, but that was never the intent from the beginning.

Like this was just like, in fact, when we released that episode, I don't think we had the RGB like 101 branding on it because it was just like, hey, here's this really cool thing that we're excited to talk about.

Like this really made a big difference in how we play games, how we capture games, in a lot of ways led to us doing the channel in the first place because we were just like, hey, we've got this really great way to record original consoles.

I don't think a lot of people on YouTube are actually showing the original consoles in their recordings.

Or if they are, they're not showing them in as good a quality.

So we just thought, you know, we've got this capability to record, you know, from, you know, NES to PS3 and really good quality.

We should finally, you know, get off our butts and make a YouTube channel.

I mean, it's something that I had thought about doing for a long time, but just wasn't really able to muster the willpower and energy to do it by myself, so.

- Well, that kinda, that leads me to, I guess the, when you go back, I don't know if this is a new feature on YouTube, but now when you click on a channel's videos, there's a button to sort by the oldest, like just to go to the oldest videos first, which is actually super helpful to see all sorts of embarrassing things that I used to do on the internet and I'm sure many other people.

Like I even, I have tutorials of how to record your computer screen or emulate games, so I was using emulators and stuff, J-Ness tutorial, like that's how far back I was going with that stuff.

But I'm watching these videos at the beginning of the channel and it's all backloggery stuff like how to beat certain games, DuckTales I think is the first video you guys did.

And then Corey would have these one-offs like Star Fox or Wonderful 101 I believe and things like that.

So I guess really how did you two meet and what was the original inception behind the channel because like you said it wasn't RGB masterclass kind of series, it was old video games, and I loved that.

- Yeah, yeah.

So this does go back to the backloggery.

I don't know if you're familiar at all with what the backloggery is.

- I am.

- Okay.

- But you could explain it for the listener.

- Yeah, so it's a website that me and a couple other friends founded back in 2007 for maybe about a year and a half up to that point, we had been doing this backlog tracking thing just kind of amongst ourselves.

We had a few different systems for how we did it.

We did it through just a shared blog, and then later we kind of started developing this system.

I didn't really develop it because I'm not a developer, but I helped with ideas and some graphics and stuff.

But yeah, we kind of developed this system for tracking, like our game backlog, and we found it to be really rewarding and thought, you know, maybe other people would be interested in doing this too, because it was just kind of taking a look at our collections and being like, you know, instead of just like running out and buying another game, like, look at all these NES games I've never finished.

Like I really want to do that.

And it also kind of helped me to develop the grit to get past some of those infamously difficult NES games, like your Ninja Gaiden and your Battletoads and stuff like that.

And it's like, "Hey, I can do this!"

"As long as I have that motivation to just get one more unfinished game on my shelf, it's like I can even beat Battletoads without cheating.

That felt really good and really satisfying.

So we got that site out in 2007.

It's really ancient looking now.

A new version of the site has been a long time coming.

It did-- - I was broken around.

- Yeah, it did early on have a total revamp maybe two or three years into it.

So it doesn't look exactly like it did in 2007, But it's, yeah, it's kind of an era of the internet that I suppose is already a little bit nostalgic maybe.

So yeah, it's dated, but the beta version for the new site did go up pretty recently, and yeah.

So it's exciting that a new version of the backlogery is gonna be out there that will hopefully be more appealing for new people to join.

But anyway, I mean, it developed a really great community, and we started streaming, and we still stream to this day on Monday nights.

We started streaming in 2008, and that also helped foster a community, and just a really great bunch of mostly pleasant people.

And Corey was just one of those people who joined the community, probably 2008, I wanna say.

And I was probably aware of him by like 2009, Maybe we just became friends because we both had-- our professions were in video production and video post-production.

So we had similar jobs.

We sort of had some similar game interests.

We were playing a lot of the same games at the time.

So yeah, we just got to be friends.

Eventually, we met up in person with a bunch of other people from the backlogger community at a convention in 2000-- well, it might have been the year we started the channel, actually.

Might have been 2013?

2012, 2013?

And yeah, we were both kind of looking at the Framemeister on these websites, this German website specifically, where this guy was reviewing all of these upscalers.

And most of it was video file type stuff, and also really expensive stuff, high-end home theater stuff, sold to really rich people and things like that.

And they weren't so much designed for games, but they were, some of them did have interesting applications for games.

And but the Framemeister was kind of like the, you know, the first one that really hit the sweet spot of like this works great for games.

And yes, it's expensive, but it's relatively affordable.

Like it had a really good like price to benefit ratio.

It was about \$300 around that time.

It was.

The price fluctuated because it was, you know, sold in yen.

Yeah.

Oh, yeah.

So around the time we buy, it was like \$300, which seemed like a lot to put into retro gaming at the time.

But really, I mean, you think about it, it's like, well, this is what you would be paying for a new console, maybe less than you would be paying for a new console.

And if you are relatively serious about retro games, it didn't seem that unreasonable in a lot of ways.

So yeah, we were kind of looking over that.

And eventually, Corey took the plunge.

I want to say it was like maybe spring that year.

And I'm like, oh my gosh, that's a lot of money.

You're spending on this thing that like-- we're looking at these screenshots on this German website.

And it's like, this can't even be real.

There's no way this actually works the way that it looks like it does.

The original systems don't output that quality.

We know this, right?

And then he got it, he sends me the pictures, and I think within a month I'd ordered my own.

We started looking at other capture cards that were really good, for the time anyway, like 720p, 60 HDMI, that was kind of a difficult thing to actually record at the time.

And we were like, we've got this capability, we should make a YouTube channel.

And then, you know, so we spent all this time, like, trying to get really good capture, at least what was considered good capture for the time.

And then immediately we just, like, record HD footage and turn it into VHS.

[ Laughter ] - Oh, that's right, because it's all this—it's styled after those old tapes.

- Right.

So that was an idea that Corey actually had probably before we even got our Framemeisters and were talking about that stuff, talking seriously about making a YouTube channel, because he found some uploads of those Game Players game tapes, which he had a ton of nostalgia for.

And I don't recall seeing those specifically myself back in the day, but I love the VHS I love, you know, just campy cheese like that stuff.

I love the idea of, I mean, it really also made me think of like NES manuals and stuff where like, they're always like kind of misinterpreting, like what is this thing?

Like they're calling it something weird that doesn't actually, isn't actually what it's supposed to be, or they're using weird terms that sort of just don't make a lot of sense.

Like the people writing the script and the people reading the script just had, you can just tell that they only have like the vaguest idea of what's going on.

And I loved that idea.

I loved looking at these things like, what if you made videos like this except it was for new games?

And so that was when we said, hey, let's make a YouTube channel.

It wasn't, it was kind of intended to be like, well, we'll do modern games, We'll do retro games, 'cause we can record them all.

And we just thought a good thing that might grab attention from the get-go would be these VHS tapes.

'Cause it's sort of just like this, like it's fun, it's easy to understand like what the joke is, what we're going for with this.

We're playing it very straight.

And yeah, we just, we thought like, You know, this stands a chance of getting some attention.

And it did, like that very first video was DuckTales Remastered.

The game had just come out, and you know, I think... I'm trying to remember if it did get posted on like Kotaku or Destructoid or one of those sites.

It got retweeted by WayForward.

- Okay, yeah, yeah.

- Which was really cool.

You know, so yeah, that was really cool.

Like, I think we were like, yeah, this turned out well.

Like, it definitely got more eyes on the channel early on than it would have if we just uploaded something else.

Like, it was just sort of a high concept thing, as you'd call it, that's just like funny, and people wanna share it.

And then, but the idea was always, Corey always, Corey was the one who came up with the name My Life in Gaming, because he really liked this podcast that I think was called This American Life or something like that.

- Yeah, yeah, yeah, oh, still going on, yeah.

- And he was just kind of inspired by that of just like, you know, like let's just talk about like our life in gaming or just things we wanna talk about.

And we thought that that would only be something that people would find if there was some other, something else that brought them to the channel first.

So that was when Corey started doing like his Star Fox video and a few other reviews.

And then I think the first one that had both of our voices in it was the one that I saw you dig it up and oh my gosh, I'm so embarrassed of it, but it was one where we did the, or was it the top 10 games of the generation?

- Top generation, yeah, your favorites.

- Yeah, the PS4 and the Xbox One were about to come out.

- Yeah.

It's really interesting to hear your guys' voices before RGB 101, and what the channel really is, identify the tone that you guys have today, I think is obviously a bit different than these early videos, a little bit.

- Yes, I mean, it's so funny because, I mean, considered ourselves video professionals and then you go back and look at that and it's like, "The audio's so bad!

There's like this buzz in my audio!

" And I'm like, "I considered this acceptable?

What the heck?

" - Standards change, skills change.

It has been almost 10 years.

- Yeah, well, and- - You should see the stuff I was making 10 years ago.

It was with like a flip phone camera and God only knows what kind of audio.

Windows Movie Maker.

- Yeah, it's rough rough looking back at your early stuff.

And, you know, people always say it was like ASMR Corey, because it was he Well, the thing was, he and his wife lived in New York City at the time.

And their daughter had just been born.

And so he was talking really quietly because he didn't want to wake her up.

I totally, we just had a daughter a year ago, and before we bought this house in May, we were in an apartment and my office was in her bedroom and I wouldn't record while she was sleeping.

Obviously that would never work, but you know, she'd be asleep in the other room waiting for me to finish and be like, "Hi everybody, how are you?"

" (laughing) So I totally get don't let the baby, don't wake the baby while recording.

But now, now I have a whole separate building, so I can be as loud as I want, I suppose.

- Nice, nice.

- It's very nice in here, I'm very happy.

You know, it's kinda just a little crazy.

I've talked about the time and stuff, but you've said that you and Corey, your background, your jobs, is all this stuff your job job now, or do you still do, like, do you have a nine to five?

I have a nine to five.

- I mean, Corey does have, I mean, we've gone back and forth over the years of like, when we started the channel, we both had full-time jobs, and then went several years without.

Corey did pick up a remote job, but he has a whole lot of freedom and flexibility with it.

- Sure.

- And I've taken on other work along the way, mostly freelance type stuff, but you know, we're, it's, it's not like you make a ton of money doing this stuff, but you know, I can, I can make it work.

I can make it work.

You know, it's, I have very narrow mental bandwidth.

I can't like juggle a lot of tasks at once.

I'm not a multitasker.



I work best when I can just like focus solely on like one project at a time.

So I find myself working best when I don't have a lot of other distractions, but I've taken on freelance work with various game companies here and there, you know, editing trailers and stuff like that.

- Cool.

Well, I'm curious then how you guys kind of were doing remote work before it was cool.

- Yeah, yeah.

- I mean, for this long, the two of you have not lived in the same state.

You got our guys in the east coast, northeast, I guess Corey's now in like Kentucky or something?

- Yeah, he's, I mean, Cincinnati area, but he is in Kentucky.

You know, I always tease him because he's like, whenever people ask where he's from, he's like, "Oh yeah, I'm from Cincinnati.

" And I'm like, "Come on, dude, you live in Kentucky, just own it.

" - Just embrace it.

But this channel has always, to me, been a joint effort between the two of you and then other people you bring in to help or consult and give you advice and all this sort of stuff.

How has that process worked and evolved over the years?

The two of you working together, when is it, "I'm gonna do this video, Cory, you're gonna do that one," or, "This is one we're gonna team up on," like an RGT?

- Right, right.

I mean, it generally just kind of depends on where our interests are with the video or who has access to what hardware, you know, it's, that does surprise people that it's like, "Oh, wait, you guys don't live near each other?

" I mean, it's not so far apart that, you know, we can't visit, you know, when we want to, you know, I mean, it's only about like an eight or so hour drive.

But yeah, I mean, we've always used Dropbox.

Like that has always been just really consistent for syncing files.

And it's just like, hey, can you give me a B-roll shot of this?

You just put it in Dropbox, and then sometimes you just edit straight out of Dropbox, right?

You don't even copy it anywhere else.

That can be a very efficient way of working, especially when you're trying to get something done quickly.

You're like, I don't want to copy this.

I'm just going to edit out of Dropbox.

I always found Dropbox worked better than Google Drive for that kind of purpose.

Like, syncing always seemed a little flakier.

But Dropbox has always been good.

But we do have a network access storage that lives in Corey's house.

That's not quite as good for syncing stuff.

It's a little slower, even though he's got really good fiber internet.

I don't have that option here.

But that works.

So yeah, we just, you know, we, oftentimes we will provide a lot of support for whoever is the editor for that episode, or if they, you know, if they're like the only editor on that episode, you know, the other person will provide as much B-roll as they can, or as much, we like to call it G-roll, like direct capture gameplay footage, we just call it G-roll for like game.

- No, I like it.

- I like it.

- That's just become our term that, we've kind of spread that among a few friends that they understand.

- I like it.

- They understand what we're talking about when we distinguish between B-roll and G-roll.

B-roll was shot with a camera, G-roll is direct capture.

- G-roll is game by.

Gotcha.

I like, 'cause your videos are full of, the A, B, and I guess G-roll as well.

'Cause you've got those, oh, the slider shots all the time.

You guys are always sliding that camera.

I love it.

- You know, I mean, if people might think like, oh, like you're putting out a lot of effort, like making all these fancy moving shots.

And the reality is, I think they let you be lazy because it's so easy to set up the slider shot and just because there's like movement in it, and like it looks cool, and you can also like linger on the shot for a little longer 'cause there's movement and it remains interesting for longer.

So it actually lets you get more interesting shots more quickly and more easily and let you use them for longer in editing, yeah.

So we do stuff like that.

What we found kind of in more recent years, though, is that when we both appear in an episode, generally speaking over the past, like, I don't know, three or so years, when we're both in the episode, we are usually the editors on the parts that we are speaking in.

- Wow.

- We used to do it to where like, okay, I'm editing this episode, Corey's editing this episode, and we record our on-camera parts and our VO, and we trimmed down the VO, so we cut out the outtakes and stuff.

But then we hand that to the other person, they put together the whole episode, and then we just provide B-roll and G-roll to the editor.

But now we've kind of found that to be a better, work process generally to where we're just editing our own parts and then one of us most likely whoever finishes last is the one who actually puts together the final file like will like Corey like if I'm running behind Corey will export his Segments is like a ProRes file put it on Dropbox and then I you know alternate between us and you know make sure that, you know, his audio levels are relatively balanced to mine.

And, you know, I don't have to make any major changes.

But but the reason that works so well is it lets us divide up topics kind of by our area of interest.

You know, so like, for example, like, I really like getting into like scalar numbers and, you know, and, you know, talking about like, exactly how the interpolation, I was gonna say interpolation, that's your thing, in this particular example, and, you know, really doing that pixel peeping type stuff.

And, you know, he was doing a lot of that for a long time too.

And then he eventually was just kinda like, like, I feel like I'm pretending to be you when I do this.

You know, like he's riding it like I would ride it, but then he never feels like he quite, he wasn't feeling like he quite got it right.

So, like he, like, kind of got to a point where he's just like, I'm gonna leave all that resolution stuff to you.

You ramble on about that.

But then on the other hand, he's so much, there's so many things like, he's so much more knowledgeable about flash carts and save files stuff.

- I was gonna say, I'm looking at his save cart video stuff right now and I was, what was it, I was watching your stream Sunday, 'cause you guys stream every Sunday night, and the mem card PS2 was mentioned.

He was like, "It's an instant pre-order.

" And I was like, "Yes, it is.

" - Oh yeah, yeah, yeah.

And he's so much better at like, you know, paying attention to like, firmware updates and like, news and stuff that's like, coming up and, you know, retro gaming and stuff.

And so he's like, usually more aware of like, new features and new products and things.

And so, he like, really gets into some of those other features that I don't know as much about.

So we can really like tune things to our area of interest and that keeps our energy up, you know, through the editing process.

- Sure.

- And then ultimately at the end of the day, you've made a video that is twice as long as the effort you've put into it.

And that's actually really satisfying 'cause you're like, wow, like I put in like, know, I made 20 minutes worth of video, but I'm actually releasing a 40-minute long episode.

And it's like, that feels kind of good, actually.

So yeah, it's evolved over the years, how we divide and assist each other.

- I think it's remarkable to hear that, and the video style and editing, I think, is, in those episodes in particular where it's the two of you is so consistent.

There is a My Life in Gaming style to a video.

There really is, and for two people to be editing that, two different people who have different tastes and styles to come together and make one thing I think is really cool, especially remotely.

- Yeah, I mean, that's good because, I mean, you know, you don't, like, I see differences, and Corey sees differences.

You know, like for example, Corey is much better than I am at like, just like taking a break from the VO and just like laying the music breathe a bit or like dropping in a little like sound effect gag or something like that, you know, or, you know, just some funny something that happened while he was shooting B-roll.

Like I can't remember what video it was, that sometime this year he did something where like, he was like trying to put a micro SD card and like the spring just like, pew, just flew out and he just left it in, you know?

Like it's so much better than I am is just like finding those little moments.

Like one of my favorites was, oh my gosh, what was I doing?

I think it was on the analog pocket video.

- Okay.

I can't remember what I was doing.

I think I was trying to fit something.

I think it had something to do with like the GameCube link cable.

- Yeah, the adapter cable thing.

- And I think I was using like a screwdriver to like do something.

- 'Cause you gotta take out those prongs or whatever to get it to seat in the bottom.

'Cause I did the same thing.

I was like, I need to see the Tingle Tuner at 10 X scale on this screen.

- Yeah, I think it was that, or it was some other accessory.

There was some accessory that I was like struggling to like pry open or open up or something.

And Corey was actually the one doing this section, but like, 'cause he was like doing the, like at the end of the analog pocket video, he was like covering like, like let's just look at a bunch of different accessories and see what works out and see what doesn't or see what works, but maybe it's a little difficult to use in this situation.

And the one thing he didn't want to do was, I think it was that GameCube link cable stuff.

- I, yeah.

That was the first thing I wanted to try with the pocket when I got it.

- Yeah, so he was like, he was like, I'll do this section, but like you like open it up and let me know if there's any like issues, you know, with it.

And so I'm shooting this b-roll of me, I don't know, trying to open up something and then like I just go out of my breath I go, "There we go," or something like that or "There it goes.

" And like he like actually kept like me just saying that like off camera like just, "There it goes.

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the bottom of the system isn't exactly designed to accommodate for the tabs on an official cable.

But if you take the screws out, then you can pry open the shell with a little force.

- It was the funniest thing.

Like I was just dying laughing.

And I would have never thought to actually include that in there.

So like there's differences.

You know, I'm very like meticulous and precise in my editing style.

Like I almost to a detriment where I just like take too long on a lot of things where I'm just like going over a cut again and again and again.

and I'm like, "Eh, I should bump this over a frame or two.

" You know, I overthink those things a little bit, but you know, ultimately it all comes together in one way or the other.

- I love it.

It's so good.

I sent you what I tweeted out forever ago.

- I see it.

- It's so.

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(laughing) I wish the dock had the link cable port in it.

Like I feel like that was a total miss.

- Yeah, the dock, you know, I actually updated the dock a few weeks ago for the first time, like maybe a year and a half or longer.

Like, I mean, I don't think there's been recent firmware for it, but I hadn't, 'cause like the dock still to this day is like, the pocket itself is amazing, but the dock is, it's not the seamless experience of docking a Nintendo Switch, you know?

- There's, it's, the doc is okay, but it's definitely not my preferred way to play Game Boy games on a TV.

- No, I, you, I was saying before the show, you're a man after my own heart, and we're both kindred spirits, I should say, in this pursuit of playing Game Boy games on the TV.

You know, you were drawn to the Super Game Boy, I was drawn to the Game Boy player on the GameCube.

I still remember getting it for my 10th birthday, birthday.

It was the only birthday I got everything I wanted because both my parents were out of town.

They were on mission trips over.

My mom was in Holland, I think, and my dad was down in Ecuador.

So they were both out of town and we were staying with my great-grandmother.

It was the only birthday I got everything I wanted and that included the Game Boy Player.

It was so.

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and I, you know, I still have it and it is.

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and then again, thanks to to you guys, I learn about GBI and the, you know, the GCHD mods and stuff, and it's like, oh my gosh, it looks so much better now.

- Yeah, oh, I can't, I really need to get around to testing GBI on the RetroTINK 4K.

- Mm, oh my gosh.

- Yeah, I tend to use the GBA Consolizer just because it's just ease of use.

You just plug it in, you turn it on, use a Super Nintendo controller, not a lot of fuss to it.

know, GBI, you know, it's incredible.

GameCube stuff moves so fast.

Like, it is wild lately.

Yes, it's nuts.

It's a very healthy development scene, and I feel like if you, like, look away from it for like two seconds, then you're like totally lost.

Yeah.

Because it's like, oh my gosh, so many things have happened, and I'm always like, oh no, like, I need to show GBI in this video, but I don't have the most up-to-date one.

It's been a while since I used it.

I'm gonna probably have some setting wrong or something 'cause everything is like new and different.

It's great, it's great, but I have such a hard time keeping up with GameCube.

- I haven't, my biggest barrier with the GameCube for a while was, it was so cumbersome to update it for me because I had that serial port two, the SD card adapter in the bottom, but that's obviously under the Game Boy Player.

And I didn't have the one that like pokes out the side.

So I'd have to take the whole thing apart just to get the SD card out to update that.

But then I got to use my action replay to like boot into Swiss because I didn't have any of the.

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- See, oh.

- But now it's like, now you can just solder a Raspberry Pi Mini in there and it'll boot up.

But it's crazy.

- Yeah, yeah.

I need to really figure out a better way to do GameCube homebrew stuff 'cause I'm still using the action replay, and I hate it, I hate doing that.

- It's such a big barrier, 'cause it's like, you gotta put this disc in, and then you switch the disc out.

But I actually, in the move, so part of my, the new office setup or whatever, is I finally off to, I'll just turn the camera for you, over there's all the games, and so really for the first time in my life, I have every console hooked up, ready to go, you know, that, the dream of, I can play anything at any time.

It's all hooked up through the RetroTINK and it can do whatever it needs to do.

And so I tried to boot up my GameCube the other day and wasn't reading disk.

I was like, no, my time has come.

- Oh no.

- But it coincided with the new revision of the ODE of the GC loader being reinstocked.

So I just went that route instead of thin.



And so now I just pop in and out an SD card in the disk tray from the Laser Bear.

So that's much better.

But my entire collection now is essentially, I mean I have another GameCube and my Wii, like I can still play on the systems, but my other GameCube's Japanese, so that would require the action replay.

Or I play on the Wii, which doesn't have that digital video out.

So I'm in this weird spot where my GameCube collection isn't usable, right?

I guess I just have to buy another GameCube is really the moral of the story here.

- Yeah, I've been lucky on GameCube.

You know, I've got three GameCubes and one of them has the GC loader in, but that's kind of like the one that I put away and only bring it out when I need it.

But I've got one GameCube hooked up, my original GameCube hooked up to my CRT setup.

And then I've got another GameCube set up downstairs in the living room where I try to keep the living room only HDMI stuff.

So it can be retro as long as it has an HDMI mod or it's got like my GameCube as a CARB that lets me do HDMI output.

So I do have two GameCubes that have optical drives.

And luckily, you know, the only problem I've ever had, and I think this actually applies to both of the GameCubes, So I don't think it's an issue with the system.

Like I've got a Mega Man X command mission.

- Okay.

- And for some reason it won't read on a GameCube, but it will read on a Wii.

- Oh, that is weird.

- For whatever, that's the only game I have that has a weird issue.

But yeah, I've always, I've had good luck with GameCube.

In fact, I played, I was streaming on the backlogery streams for the past three weeks.

I was streaming "Lost Kingdoms" on the GameCube.

and you know, zero problems.

So yeah, I've been lucky on that front, but you know, you're talking about, you know, setting up your ODE and stuff.

And that's like, that's another area where like, Corey is like so much more on the ball about that stuff.

'Cause like- - It's been a learning experience.

- I hate setting up flash carts.

Like, I have only ever bought like one flash cart.

'Cause like, all of mine are just like, hand me downs from Corey.

Like he gets a new version.

- That's not a bad setup though.

- And he gives me the old one, 'cause he's like, well, you know, it's useful for the show.

Like you need to be able to record more different games.

And like, but like, see like sometimes he sent them to me with an SD card and it's already all set up and I use them all the time.

But then he'll send me one where he didn't give me an SD card.

And I'm just, it'll just like sit there for years and I'll never use it.

I hate setting that stuff up.

I hate updating the firmware on it.

Like I dragged my feet on updating that kind of stuff and like setting up that kind of stuff so bad.

And Corey, like that just like, that hits his like dopamine spot, like setting up, like organizing files and setting that stuff up.

And that kind of stuff is just like, I'll do it tomorrow.

- I remember, yeah, I was setting up, I think my, and Mr.

at the same time.

Like I was just like, I just need to put everything on this so it's done.

And that was an interesting like back and forth, back and forth, back and forth, trying to organize.

And then.

- Yeah.

It seemed like I've never, like I've never gotten around to setting up my Mr.

for like having like a good storage system for like CD based games.

- I'm still just using the SD card, but I'm not running a lot of PS2, but I did notice the TurboGrafx was running, was loading slow the other day.

The Tur, is that?

It was like really slow.

- Oh yeah.

- Like unbearably slow.

I was trying to load Rondo, and it was just crawling.

So I wonder if that's-- - That's strange.

- The SD card or if I'm out of date or something, I don't know.

- Like I've definitely played, You know, I played "Valus 2" on the MiSTer, on the PC Engine CD-Core.

I mean, this was probably like two years ago.

And I did get a freeze.

I did get a freeze.

Luckily, you know, that game saves.

But yeah, you know, I don't know if that was like a data access error or what.

- Yeah, I couldn't figure it out, it was driving me a little nutty.

But anyway, it made sense.

- I wanna test like more PS1 stuff, but like, I'll just like put like a couple of games on like my flash, you know, but like, but that kind of limits like how much I really use that core and how much I do with it.

And, you know, I should come up with a better system.

You know, I really want to do something.

I want to do a video on sometime.

And again, I'm just, I'm dragging my feet on like, figure it out, like, okay, what, I need to get a hard drive that would be good to do this with.

Like I figured out this way to come, I mean, you can convert, you know, you can do the, like the compressed CD, full of CHD files for like games on Mr.

Like you can compress the CD into like a CHD file.

And I figured out you can do the same thing if you rip a music CD in a certain way, you can also convert them to CHD.

so they take up a lot less space.

And I even figured out a way to take, like, WAV files or other audio files and build a CD that is actually longer than a CD would actually be.

And export that as this compressed disk format.

And of course, not burn it to a disk.

It wouldn't work on a real disk.

but you can load it up on say like the Sega CD, Mr.

Core or the PS1 Mr.

Core, the PC Engine CD Mr.

Core.

And it will read it, even though it's longer than a real CD could ever be, it actually works.

And something about that like is so cool to me.

And like, I love the idea of like, I can use my CD collection without like actually having to put wear and tear on, you know, an old CD drive, even though I'm not using the disc, I know this is so many more steps and so much more cumbersome than any logical person would ever do when they could just stream their music or just have play exactly the songs they want or have everything in the cloud or have everything on their phone or whatever.

But I love the idea of using my CDs, even though I'm not using my CDs or building custom CDs that can run in a Sega CD core.

Like that's really cool to me.

And I don't know if, I might be the only person in the universe that thinks that's cool, but like, I'm like, I legit want this to be like my new way to play music.

And I just need to get around to like ripping all my discs and storing them in this format.

'Cause I just, I don't know.

I think that's, I just think that's really cool.

And you know, it's, that's what I always like to say when people are like, people are like, like people laugh, like I don't get like all this, all these emulators are already on PC.

And I can also do GameCube and PS2 and PSP and all this stuff.

Like, you're like getting all excited that like, some old arcade games are finally coming to Mr.

And I'm like, look, like you think about how the Mr.

works.

Yes, it's emulation.

Yes, it's only as good as, you know, the person who created that emulator.

Like it's not a magic bullet to just gain exact perfection, but it operates in a different way.

You've got this whole thing of like, the processes are happening in parallel versus how they would have to be sequential in a software emulator.

I mean, the software emulator can be written to preserve the functionality of the hardware really accurately, but the actual way it performs is dependent on a lot of other factors.

And then you have this operating environment is just doing that thing that you're telling it to do.

And does the idea of how that work tickle something in your brain and make you enjoy it just that much more, or does it not?

And it's okay if it doesn't.

Everyone has their interests.

My friend who is the owner of the backlogger, we stream together every Monday night.

I'm like original hardware using my real carts, real discs.

And he's like full on emulation.

He loves organizing his emulator set up, loves customizing it and stuff.

And like, he's like, he's a programmer.

Like that kind of stuff is interesting to him.

Like customizing it, really making it his own.

And like for me, like I just think the hardware side is just it, and the interface of the mystery, like it just, it appeals to me more.

And like either that tickles something in your brain and makes you enjoy it more or it doesn't.

And at the end of the day, no one needs to be saying, oh, this way is better, oh, that way is better, why don't you just do this, you should just do this, this way is better, it's cheaper, it's free.

At the end of the day, the more people developing emulators and methods for playing games, the better it is for everyone.

The more eyes that are on, how do you emulate a PC Engine?

How do you emulate a Sega Genesis?

How do you emulate a PS1?

developers on both sides of software and hardware emulation have come up with things that have fixed things in the other type of emulation, you know?

And so that it benefits everyone just for there to be more people interested in creating this stuff and more people interested in playing this stuff.

Whatever reaches people and whatever puts more information, more accurate information and more documented information out about these consoles, it's a win for everyone, whether that is your chosen method of play or not.

- Yeah, my draw to things like the MiSTer or an analog console or anything like that is something in my brain goes off when it's hardware emulation.

To me, I want that accuracy, but I can't necessarily get that in software every time.

So the thing that tricks in my brain is hardware emulation is still emulation.

But on the other side, software emulation lets you do things that you never could do on real hardware.

Like one thing I tried was a few years ago I got one of those PS3 3D TVs.

So I suddenly have access to 3D, right?

Well of course the first thing I try is not my PS3 and a 3D game.

It's I run, you know, I hook up my computer to it and run the dolphin emulator and put Metroid Prime in 3D because originally they were like, "What if we could do 3D on the GameCube?"

" And, you know, the concept was Metroid Prime could maybe have been in 3D and Dolphin allows you to spit it out that way.

You know, so it's just, they both have pros and cons and it's just, how do you want to play the game?

Really, the important thing is are you actually going to play the game?

- Yes!

Don't just sit there with everything and "I can play this.

" Well, "Actually play it" would probably be better, I think.

And just play it in the way that's the best, what you prefer, easiest to access, because, you know, Mr.

Prices these days aren't cheap either.

- No, no, no.

- Especially, it's crazy.

It really comes down to, you know, some people might get a lot of satisfaction from like, you know, mods and stuff like that on like PC games.

And I remember, you know, when Skyrim came out, like I spent an entire day just trying to like make the graphics just that much better.

I was really annoyed by how the shadows looked and stuff.

And I was like really annoyed by myself by the end of the day.

I'm like, I wasted an entire Saturday that I could have spent playing Skyrim.

And I was playing Skyrim, but I wasn't playing Skyrim.

This is back when it came out.

And I like playing games on consoles because I like to get the best experience that I can with that console.

But there's also kind of this limitation to it that just is like, well, I made this as good as I can get it, with the relatively limited controls available to me to do so, you just accept it and you play the dang game, right?

And a lot of people are like, oh, well, you're like messing with all this stuff on scalers and stuff, but it's just like that.

That stuff is really relevant to my interests.

And also I feel like there's only so much much you can take that as well.

Like when it comes to modding a PC game or even just changing the normal settings of a PC game, like you could just go on and on and on and on forever.

- Yeah, you're not waiting for pre-compilation shaders to load on your RetroTINK while also maybe loading in modpacks and putting Thomas the Tank Engine in Skyrim, you know, it's just.

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- Yeah, yeah.

- You're just tweaking.

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- Which is cool.

That's just not where my area of interest is.

- Yeah, same, same place.

Before, I do wanna talk more about the Mr.

and FPGA stuff, but I wanna go back to my life in gaming really quick.

- Yeah, yeah.

- And I'm kinda, I'm curious about this, your research process, because there's a, your videos are clear, concise when they need to be.

They really break down some complicated, you know, things.

especially those early years with like, C-Sync and Sync on Luma and all this, you really break down complicated information in a way for a bunch, for anyone really, to watch and understand if they're willing to watch and put in the time.

But you have to learn that stuff first.

And now we're getting, the world is so much larger, right?

Now it's HD mods for systems that are doing their own scaling or scan lines now, slot mask, I feel like have gotten really big in the last year.

And you know, what is that process like to you?

Are you just going to retro RGB asking Bob saying, "Bob, tell me how this works.

" - Well, I do ask Bob some things.

- I go there all the time.

- I mean, you know, I always like to say that I'm dumbing it down to my level.

When I set out to make a video, It's not because it's like, ah, yes, I know everything about this.

It's like, I want to learn more about this and making a video is the best way for me to learn this.

So.

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- That reminds me of your Game Boy IPS video.

I feel like that's exactly what you're talking about.

- Yeah, that video is definitely a very clear example of that.

boy, I hated making that video.

(laughing) But it ended up being interesting.

- Would the LG C2 video be any better?



- Well, you know-- - That seemed very frustrating.

- I am so glad I did that video because I wouldn't have put it through, put the C2 through all the tests that I did to make me come to the conclusion that, wait a second, while I can still exchange this for an LG C1, I should do it.

If I wasn't making the video, I would probably have not discovered the issues that I discovered.

- It's, the timing on that video was so crazy 'cause I had just maybe, at the most, a month earlier, had just bought a C1 because my C9 had some dead pixels and was under warranty.

And Best Buy was like, "We'll just give you "a \$2,500 credit and you can keep the C9.

" - Wow.

- I don't, I don't know how I got, so the C9's inside and it just watches TV, 'cause it really, I'm telling you, three, maybe four dead pixels, nothing crazy.

So I got a C1 and then you put out a video and I was like, ah man, I missed the C2.

And then your conclusion was buy a C1, and I was like, yes.

- Yeah, yeah, well, you know, the, like, I wanna say like less than a week after we released that video was Limited Run Games opened their retail store.

And I live like two hours from there.

And we're like, oh, we should go to the store opening event.

And Cory and I had actually just gotten new cameras.

And we were like, this would actually be a good environment to just casually test our new cameras, not doing anything that really matters a whole lot.

but just like, it's just a good place to do like a test run of our new cameras.

- Sure.

- And so we offered, you know, 'cause we know the people at Limited Run, we're just like, hey, we'll shoot some B-roll for you.

And so we were going around shooting B-roll, which was nice because it lets go in and out of the store freely, you know, 'cause there was a massive line, like, you know, 'cause they were only laying so many people in at a time.

So, you know, it kind of had perks of, you know, well, we gotta go inside the store to shoot B-roll, But anyways, we're like going down that line and shooting B-roll, like no kidding, that day, less than a week after that OLED video came out, there were probably like at least 10 people who said, "I bought a C1 last week because of your video.

" I couldn't believe it.

- You should have been getting commission, man.

- I couldn't believe it.

Like less than a week later, that many people in that, just in that one location told me that they made a major television purchasing decision on something that I had done less than a week ago.

Like that was a really surreal experience.

- That's so cool.

But back to the research part of it, 'cause I like what you were saying about, you're interested in something, you wanna learn more about it.

So the way to do that is to go out and make this video.

- Right.

it's like you're teaching yourself and then passing it on.

And I really respect that.

I majored in journalism as listeners may know if they've listened to anything else.

So like that, to me, that's just journalism, what you're doing, that's what you're doing.

So that speaks to me in LA.

- I guess it kind of is.

And maybe that comes from, you know, I worked it before, well, when I started my life in gaming, I was actually, I'd been working for many years at the college, the TV station, at the college that I graduated from.

And at one point, my boss became, they brought in a new director of marketing and communications, and he happened to be, he had been a TV reporter for many, many years.

And he was looking to get out of TV news and do something different.

And so I learned a lot watching him, just 'cause he had this very old school news way about him.

And he really liked going around with me and shooting news stories for the school because that was getting to scratch his itch of what he missed from his job.

And I learned a lot just from watching him do his presentation segments.

A lot of people will sometimes criticize me of when I present in video, like, oh, you sound like a newscaster or something.

Frankly, some of my technique was absorbed by watching him.

And he was actually the guy that did the voice on the how to beat videos.

because I wanted someone who could do a professional sounding voiceover, but was also completely, someone older and completely clueless about what I'm talking about.

And of course, some of the cluelessness was written into the script on this.

But yeah, I got him to record those voices for us.

- That's so cool.

- So that was fun.

So yeah, I learned a lot just through shooting those news stories and just observing how he wrote things and presented on camera.

And of course I never, he knew I did a YouTube channel of course, 'cause he knew about like the, how to beat scripts that he was recording.

But I never let on that like I can write, I can kind of present on camera.

I didn't want him to know about any of that because everyone else in the marketing and communications department, Like he roped into like, oh, you have to make a story for this month's show and you don't have to present.

Oh, they hate it.

Like they did not like presenting on camera.

They really didn't like doing those stories.

They just wanted to do print stories, but oh, he roped everyone to the video stuff.

And I'm like, he doesn't think I can write.

Let's keep it that way.

- Yeah, let's keep it.

(laughing) He just writes about DuckTales.

- I just, yeah.

I just wanna rhyme out about what I'm interested in, and I don't know if I can feign interest in some of these subjects.

- That was my biggest hurdle at journalism school, 'cause I just wanted the degree so I could go write about video games at a place like IGN or something, but to graduate, you had to write all these news stories for the school, and I've struggled with that a lot.

I did get them to accept some video game writing that I did for outlets like freelance and stuff.

but I had a cool professor who was understanding.

- I mean, you know, I did the same thing.

Like I always, you know, always in school, always wrote about things that like were very specific to my interests.

I mean, this is honestly like, this is not how I should have done things, but like, you know, for like essays for English class or something like I would, I would write about like video games or something like that because I write about a subject I already know about, and then I find sources to support what I already wrote.

'Cause you have to have a bibliography.

- Sure.

- But now today though, I'm genuinely learning things in my research and testing processes.

Because I've gone beyond what I already know.

- I've, in high school, I had to give a speech.

And this is like ninth grade.

And I'm terrified of public speaking at this point.

Now it's ironic because I could talk to a crowd of, I don't know how many people and be totally fine.

But I was mortified of public speaking.

And so I wrote a speech about stuff that I could, you know.

- It was a debate class, so it kind of had to be like the political in some way.

So I chose like, what is a patriot?

But I wrote about boss from "Metal Gear Solid 3.

" (laughing) - You are the patriots.

- Yeah, and I was like, she had.

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(both laughing) I'm talking about how she, you know, her whole plot and what she did for her country.

(both laughing) - That's great.

- I also wrote about Jack Bauer from 24 'cause I was really into that show in ninth grade.

It was good.

- My biggest thing was doing like this major English research project on "Homestar Runner.

" (both laughing) - That's.

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- Which was, I mean, - Home Star was a massive influence for me.

- Yeah.

- Just in general of like, like I wanted to do what I'm doing now before there was a model for that.

And they kind of, before YouTube, they, you know, here's these two brothers, they're just like, they're making the videos that they want to make, you know, putting that out there.

And they're making a living doing it, you know, They didn't do any advertising.

They only did merchandising.

But yeah, that really inspired me, 'cause I was like, man, I like doing video stuff, but I don't wanna live in California.

I don't wanna live in New York City.

- That was my thing.

I couldn't afford it.

- I just wanna live where I'm used to.

And going into video games, at the time, American video games, especially on console, were only kind of just starting to come into their own.

I feel like at that time Japanese games were still leagues and leagues and leagues ahead of Western-developed games.

On PC it was kind of a different matter, especially people who grew up playing on PC.

There's a lot of classic stuff that, to me, is not being so much of a PC game where it's not really my style of game, but there was a lot of really well-done stuff on PC from Western developers.

Especially on console, I feel like not all-- especially from Europe, I feel like Europe had a lot of really good developers even on console, like back in the early 2000s when I was in college.

But I was just like, man, if I go into video games, I'm probably going to be making games I don't like.

Which, again, that's totally different now.

I feel like-- DOUG STEVENSON-LENNER: Oh, sure.

Absolutely.

like early PS3, 360 era, like Western developers came into their own much more than they had before.

But I was just like, eh.

Like, so I was like, you know, but then the idea of, you know, what Homestar Runner was doing, where it was like, this was making video at home.

I mean, they did eventually get an office, but like, you know, it was like just this independently produced video, put it on the web for people to consume.

And somehow you make money, you know?

- Somehow.

- And somehow, somehow it just happens.

And yeah, that was like a huge inspiration for me.

Like I really wanted to, like I took some 3D animation classes in college and I was thinking like, oh, like I'm gonna make my own like Homestar like universe.

And I'm going to have like these characters and stuff.

And I didn't like flat out animation.

I didn't like Flash, so I was like, I'm going to do this with 3D animation.

I'm like, I don't know, put it on YouTube or somewhere, because YouTube had only just started.

I didn't know what I was going to do with this, but this was what I wanted to do.

I wanted to put something out there on the internet that people would watch, and somehow I make money.

And I could never get motivated enough to do it on my own.

That was why I took on the staff job at the college TV station right after graduating.

And I stayed there for like 10 or 11 years because I just, I couldn't, I could envision like what is out there for me that I would want to do.

You know, like what, like, or that I would want to do but also wouldn't make me live somewhere I don't want to live, right?

- Yes.

- So, you know, YouTube kind of became, I guess, the solution to that in a way.

So, you know, I kind of wish I got onto it a little sooner, but I just, you know, I wasn't able to motivate myself on my own.

Like, you know, you kind of have to have another person, like I think holding you accountable.

- It helps.

It helps, it helps to get those projects done.

So, and ultimately I'm glad I'm doing, you know, what I would consider like nonfiction work, even though it is about works of fiction, it is about video games that are fiction, but it is about things that exist in the world.

Like it is about an item, it was about an object, it's about a game, it's me and my reaction to this game or this hardware or what I take away from it.

And I kind of take that to be like how I was always, I always like tried to be like artistic and stuff, but I was never that good at painting.

My drawing skills like definitely deteriorated over the years.

I was always better at photography, right?

I've always been better at like looking at something that exists and then doing something creative with that.

You know, so photography and videography and then, you know, ultimately, like, you know, looking at video games or looking at video game hardware, looking just, you know, using - it's creative in a way, but it's, you know, I don't know, it's just - I'm glad that I fell into that rather than the original thing of what I wanted to do was was like follow this like Homestar Runner type thing.

'Cause I'm not clever enough, I'm not witty enough to like come up with the kinds of stuff that they did.

I'm not so much creative in that way.

So that would have been a mistake.

I'm glad I ended up going in this direction.

It just took me more years to see it.

- I really, really relate to what you're saying because I just, for the longest time it was, I wanna go out and write at IGN, I wanna write at these big video game websites and I just wanna do news and podcasts and things like that.

I started podcasting back around the time Brawl was coming out, so that 2007, 2008 time period, I was inspired by Show Me Your News and basically I was like, I'm just gonna do that.

So I made my own Smash Brothers thing, which is, you know, riffed off Peter, who's a host of that show, pretty heavily.

And now Peter and I are actually friends, and it's great.

And I mean, that's how everyone gets started.

You're like, I like what they do.

I'm just gonna make that.

But then eventually you develop your own style and you come into your own.

But then that turned into, well, you know, I can't move out to California.

It cost a bajillion dollars just to live out there.

In college I had met my would-be wife at the time we got married at the end of college, but I had met her and it was pretty clear that was what was gonna happen between us.

And I was like, it's not just me anymore.

I can't just move, make a decision like this by myself anymore.

And I kinda just was like, well, what do I, how do I do this?

And it took me a lot of freelance work.

I used to write guides and stuff, actually for IGN.

So I did get to IGN in one way or another, which is just not quite the way I expected.

And then I had this kind of burnout phase of like, this isn't what I wanna do, and it took coming out of that to realize I can just do this myself, which is what I'm doing with you right now.

I'll just host my own thing.

I'll do my own thing on the internet, on my own website.

I do my own YouTube thing now.

find so much more creative and emotional satisfaction out of controlling what I want to talk about, not being beholden to, "Well, this is what's trending on Google right now.

We really got to write about..." I got to help with the Red Dead Redemption 2 guide, right?

So my job in that game, while I did get to play the story actually fairly at my own pace, was pretty good.

My job, and what I remember most about that game besides the story, was hunting all of the legendary animals.

So like my time with Red Dead is defined by "Here's how you get the legendary cougar, here's how you find the legendary moose.

" And so my brain just, you know, that's how that game is filtered in my mind.

Hunting wild, legendary animals.

And now, if I want to write about something or talk to someone, I just do it.

Or I, you know, I ask to do it.



And it's so liberating, I think, just to.

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And now, but now I am by myself and so I don't, I need to find people to motivate me to do other things because like, there are ideas I want to do, but I just haven't taken that step forward necessarily.

- It can definitely be tough.

- Well, I think they kind of go together here.

I might just lump this together because, you know, my life in gaming doesn't just do, you know, breakdowns of hardware or controllers and all this stuff, but you also have documentaries.

And one of my all time favorite videos on your channel is your Tom DuBois.

It's not Dubois, it's DuBois.

your Tom DuBois video, The Man Who Drew Konami.

And I remember when it came out, I was like, this is so cool.

Your brain processes are like, yeah, someone drew this, right?

Like someone drew this Castlevania art or this Teenage Mutant Ninja Turtles art.

But it never occurred to me that it was actually, you know, like there's a story behind this person.

And so I guess to focus on Tom just for a bit, Like, how did you, how did you realize that someone drew this and let's talk to them?

Like, 'cause I think his story is wonderful.

I share it with everyone.

I'm like, you gotta watch this video.

- It came to us.

We were going to, I think, I think this was the trip when we went to San Francisco.

So we, we did a documentary on M2 in Japan.

- Yes.

And we wanted to have the guys at Digital Eclipse be part of that.

So we have a little bit of Frank Cifaldi and Mike Mica.

Frank was still with Digital Eclipse at the time.

And so we visited them, shot a bunch of stuff there.

And we also, we did a few other things while we were out there, like we interviewed Brian from Retro USB, who did the AVS.

We interviewed him for Analog Frontier.

So, you know, we were like, okay, there's like a number of things we wanna do in San Francisco.

And someone had reached out to us, Matt Fowler, who is also in the Tom DuBois documentary.

- Yes.

- He, I don't really know the whole story, but I think he like kind of discovered Tom.

I think among maybe art collecting communities and stuff, I think Tom was kind of known, but his story hadn't really come out, and he himself I don't think was fully aware of the impact that his art had had and how it had endured on virtue of being great art unto itself, but also just because it's attached to some of the greatest video games of all time, right?

Like that alone makes his art timeless, and that was kind of how I started off that documentary, because I'm like, when people go to hunt for some of these games that they really want to own, like their art is what is in their head.

They're like, they're looking for it.

They've seen online what this game looks like, and they're looking for it.

And so that is this association with these incredible games.

But anyway, yeah, so Matt Fowler, like, he wanted to do some projects with Tom, and, you know, he was also really into, you know, the retro hardware and RGB video and stuff, so he was aware of our channel.

And he reached out to us saying, "Hey, I can get you access to this guy.

" And so, you know, I was very much unsure.

Cory was the one that coordinated with Matt and everything, and I was really unsure if this was really gonna be all that interesting or anything.

I just didn't know.

And so we went out there the day before we shot and met up with him and went out to dinner and just had a good conversation.

And Cory was like, "It felt like you had a really easy time talking to him, so I think you should take the lead on this.

" 'Cause we just went in like really not knowing what to expect.

Like, is this gonna be much of anything or not?

So, I don't think I explained this part of the story, but yeah, this was kind of like on the way home from San Francisco.

It's like, well, we'll make a stop in Chicago and see if this is anything.

- Yeah.

- So, yeah, it was very unknown.

And so we got there the next day to shoot.

We shot a ton of B-roll just like on his dining room table.

He pulled out all of this work and we just kind of tried to get an understanding of like, you know, what his career was and what some of the stories were.

And, you know, and then at the end of the day, we shot his interview and, you know, it turned out to be so much more than I ever could have expected.

I think he had an interesting story and it also was so obvious like how much it meant to him to realize like, here's something that I'm remembered for.

Like he thought all this Konami stuff was just another job, just another marketing gig.

And that it would be forgotten as much as a painting he did for some jelly, or hamburgers or whatever, there was a lot of that kind of stuff.

But he did a lot of really amazing stuff.

And so, yeah, it was just, it turned out to be a really good story.

And I was really motivated to get that together really quickly.

And the response to that video is possibly the most overwhelmingly positive to any video we've ever released.

But the catch is comments were just-- so many comments, so many comments, so many positive comments, relatively fewer views.

Documentary stuff on YouTube seems to be a bit of a hard sell.

- Which is so disappointing.

- It is, it really is.

- It's so, there's so much potential, right?

- Yes.

- The biggest video platform on the internet, for sure.

You know, and it's, you can really tell, you can really tell really amazing stories on there.

- And you know, I think that's why stuff like Atari 50 is so successful, because it, it tells the story of the games within the game.

It is the documentary playing on a game console, an interactive documentary, and I think when people are sitting down in that context, they're more open to documentary content.

YouTube, I don't know what it is.

I mean, it's not like the length of it is a deterrent because people love our long hardware videos.

- Yeah, and the Tom video is only 22 minutes or something?

- Yeah, it's relatively short, but yeah, it's something about documentaries.

They don't hit as hard on the views, but they hit really hard on the warm fuzzies.

Like people just respond really passionately and positively to them.

So it's worth it.

It feels good.

It's worth it, but it's just a shame that all the different levels of worth it don't apply to documentaries as much.

But it's interesting, and Tom has, since that point, I honestly can't say to what extent we played any role in kind of bringing him back into video games, but I mean, he has been commissioned do quite a few pieces of new art for new games or collections.

You know, he's done alternative art for like the Contra anniversary collection and Castlevania anniversary collection.

So he got back with Konami in a way.

He's done stuff with Konami.

He's done stuff with, you know, like he did a cover for Panzer Paladin, which was an indie game with the people that went on to do Shredder's Revenge.

You know, he did an alternative cover for Panzer Paladin.

So, yeah, like he's got he's getting video game work again.

So it's it's it's really interesting to see how, you know, we we got him when he was just beginning to realize like there's this whole community of people that really care about his work and you know who were saying things like you know American box art was always worse except except for yours like I you know people are like I was drawing I was like trying to copy your art in like my you know you you know, high school or middle school notebooks and stuff.

Like, or like when I saw your art, like that's what made me want to be an artist.

Like it was just so cool seeing that, that reaction to that video.

- Yeah, I've, like I said, it's my favorite.

I'm getting ready to play almost all of the Castlevania games for my other show, Chapter Select.

And my co-host on that show, Logan, I was like, we're talking about this video.

Like we're talking about Tom.

(laughing) When we do that, you know, as we go through these games, 'cause it's so, I was just at a shop today and I was perusing the Genesis section.

I was like, is Bloodlines here today?

You know?

(laughing) 'Cause it's always in your brain.

I love it so much.

You guys have another documentary series, Analog Frontiers, you mentioned it.

- Yep, yep.

- Part four has been a long time coming.

- Oh yes it has.

(laughing) And I just, you know, you've kind of talked here and there about motivation throughout this and tackling something like this and laser focus and I'm just, how do you feel about it?

You know, finish the video when you finish it.

You know, I want you to feel good about it.

I want you to put out what you want to put out, but I'm just, where are you at with it?

Because it's creating stuff is hard.

Yeah, yeah.

Well, and you know, like, work outside of M-League also picked up, like, a lot over the past year.

And I've finally, like, just, just now, as we're recording this, like, just now gotten back to a place where, like, I can put, like, basically almost 100% of my focus back into it.

Okay.

So, so that's part of the reason it has, you know, I've got I've got a really bad habit, I have to admit, of like the longer something is a problem, the more I am afraid of tackling that problem.

And then you feel worse about it and worse about it and worse about it, but that's not enough.

You know, and I just, we have been just, you know, me and Corey's conversations just over the past several years, you know, the pandemic years, you know, has always been like, well, after Analog Frontiers, we can do this, we can do that, we'll do this, we'll do that.

And it's just like, we say it all the time, after Analog Frontiers or when Analog Frontiers is done.

And it's like, we gotta get this done.

It's holding us back from so many things we wanna do.

And you know, the enormity of the project, you know, just is intimidating.

And it took, from when we first shot those interviews, it took a while to actually start building those scripts and figuring out, okay, what's the story here?

What story do we wanna tell with this?

And parts one and two actually started coming together pretty quickly.

Part three took a little longer.

Part four and five, I think one of the main flaws was we had themes that we wanted to explore across the two.

And I always knew neither of these are going to hit and be as interesting to people as what was in the first three parts.

And eventually-- actually, just this year, Cory said-- and of course, it was delayed because of working on freelance projects, working on other videos that came up that seemed like priorities, and also just being the back burner because it's like, "Ah, I'm so afraid of this.

It's so daunting.

" It shouldn't have gotten that way, but it's just how it happened.

But Cory was like, "Why don't you just make one part four and just do things that you wanted to do in both of those?

" And a singular final part four.

And I was like, "You know, that makes.

.

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" At first I kind of pushed back, but then I was like, "Wait, no, this makes sense.

" Because now I can see how the themes of parts 4 and 5 presented together is actually of just as much interest as the themes of parts 1, 2, and 3, whereas separate they seemed a lot weaker.

Together, they're much stronger.

And really, we had the same realization when we were making Part 3.

Because, you know, Evan Amos, who is the photographer who every single Wikipedia game console entry, or at least every single one that's a good picture, which is almost every single one, is his photo.

He's made this his life's work to document and continue to keep updated and as much visual information as possible about these consoles, what they are on the outside and the inside and from every angle.

We went to New York City to shoot, for example, we shot an interview with Bob for Analog Frontiers.

We shot an interview with Jose, which was actually kind of a spur of the moment thing.

Evan was a totally separate thing.

Like Evan, believe it or not, was actually the first documentary idea we ever had.

Oh really?

Many years prior.

We were like, the guy who's making these Wikipedia photos, like, because he did like a Kickstarter for his project.

For his book.

For the book, right?

Well, and I, well, and you know, I actually didn't realize at the time that the book was part of it.

And we actually happened to do this just when he started getting the first proofs from the publisher.

- Oh, wow.

- And-- - I love that book.

I love that book.

- Yes.

Oh, it's incredible.

And we shot that as a completely separate documentary.

And it was just going to be him.

And when I was working on Analog Frontiers Part 3, when I was, you know, sorting the sound bites and coming up with the script and everything, I was like, "You know what?"

" Because we had, again, like we had shot the Evan documentary and it was kind of sitting on the back burner, and it's like, "Oh my god, do something with that.

" And I was like, "What if it was just part of Analog Frontiers?

Is there any reason it couldn't be?

" Because I thought, you know, his work is actually like probably the largest reach of anything that has to do with original hardware, like what is this original hardware?

He has at least captured the visual of what is this original hardware.

That's most people's only frame of reference for some of this older stuff at this point.

And I thought he... this episode is about preservation.

Like he... my conclusion was I'm not putting him in this because I don't think his story stands on its own.

I'm putting him in this because I think his story is elevated by being a part of something bigger.

- Yeah.

- And so I thought that was the right call there.

And, you know, he had actually kind of been off the grid a little bit for a few years, and we were like kind of worried.

Like, "Is he doing all right?

" And when that episode came out, you know, he actually had no idea that that was coming out and that he was in it.

And he actually tweeted that very day, like, "Hey, you know, I'm still around and I'm working on this and that.

" And then when we went to Retro World Expo, the first, you know, I guess it was 2001, it was late 2001, he actually came and it took me, because you know, everyone's wearing masks.

I didn't, I was talking to, you know, someone else that we knew that he and this other friend were coming to the convention together.

And I was like not recognizing who this other guy was that was with him 'cause he was wearing the mask.

And then he started talking and he had version two of his book to give us.

- Oh my gosh.

- And I was like, oh wait, I just realized who you are.

And it was so good.



Like that was my favorite part of the whole convention is like getting to catch up with him and talk to him again after that.

And just to see that he was doing well and that I think him being included in that documentary was I think a positive thing for him.

So in very much that same way, whereas we were focusing more on some individual people in part four, I think now combining that with the themes of part five, I think is actually going to, again, serve to elevate their stories rather than dilute their stories, because you can see how it connects to this much bigger scene.

- Yeah, I love to hear that.

I can't wait, like most people, I assume, and you, I think most of all, can't wait.

- Oh, believe me, I've been ready for this to be done for a long time.

But you know what?

It's also good because we actually shot, a few months ago, we shot three new interviews for the final part.

- See, that's great.

- So there's actually people, there's actually people who are going to get to be in it who couldn't have been in it before.

So the wait is going to be worth it.

I'm working currently on a RetroTINK 4K preview video.

- Okay.

- And then I'm-- - Well, we're gonna talk about that.

- Yep.

I'm quickly going to work on a really short video about a new Super Nintendo mod that Voltar has done, which is, there's finally about to be a mod, I actually just got my system back yesterday, finally going to be a mod for non-one-chip systems that makes them sharp.

- Thank goodness, 'cause you guys were just talking about that.

I think the Retro Tank 4K stream, I think you mentioned it, 'cause you started out with the Super Nintendo.

And now that everything, like I said, is hooked up here, it's like, all right, now it's time to, I was like, time to RGB mod the N64.

Let's get the Super Nintendo in there, let's do it.

Oh, I'm so excited.

- Yeah, so I'm gonna work on those, and then Cory and I will work together on what I was saying is something that we're thinking about doing as sort of like a 10-year celebration.

and then it's gonna be like "Analog Frontiers Part 4," till it's done, this cannot be another year without the final episode of "Analog Frontiers."

" I cannot allow that to happen.

I have to get it done and move on with my life.

And not to say that like, I'm not proud of it or anything.

I'm very proud of the series, but like, it's like I'm gonna put my all into it, I'm gonna make sure it's everything I want it to be, but I am ready to move on.

(laughing) I hear you, I hear you, I love it.

Well, let's move on then.

Back to the land of FPGAs.

We've been talking about it.

It's just naturally come up in this conversation.

Scalers, misters.

- You can't help it.

- The FPGA is all powerful and really I think is the the modern star of the retro scene lately I think.

the last three, four years.

- Yeah, and it's not just the consoles, the console emulation, it's also what's driving the HDMI mods, and it's also what's driving the RetroTINK and the OSSC, all that kind of stuff.

Like FPGAs have been around for a long time, of course, and engineers have known what they are, but their potential for being able to do these very specific esoteric tasks, like upscaling old video games, which is done in a way that is, you know, off the shelf chips are not going to get you the ideal results.

You need to basically create bespoke hardware, and you do that with an FPGA.

And you know, where FPGAs have gone in just a few years from, you know, to the point now where, you know, on the RetroTINK 5X and 4K, and on the Pixel FX HDMI mods, and on the MiSTer, all of this like, you know, shadow mask simulation, and the scan lines are so much more advanced and convincing than they used to be.

And now, you know, you're getting like HDR injection and stuff, and- - It's mind blowing.

- Which makes the scan lines that much more believable.

You're getting black frame insertion on the RetroTINK 4K if your TV doesn't support it.

I mean, the stuff that people are pulling off on these FPGAs, it goes far beyond emulating systems.

It's really driving so much of what is going on in the retro hardware scene.

- It's, frankly, it's incredible.

And so I wanted to play a clip for you.

And I've finished watching your Mr.

Video, actually, and his research for the show, I was like, oh, I never finished the Mr.

episode, 'cause I had a Mr.

at the time.

So I watched.

- Well, and it's like, it's a super long episode.

- It's two and a half hours.

- I can't believe it.

- It's such a, I mean, but it almost feels like it deserved it.

Anyway, kinda toward the end of the video, and this was in, when it was published at least, was March 31st of last year of 2022.

And you had this to say about future dreams for the MiSTer.

- Nintendo 64 seems to be completely off the table from a technical standpoint.

So box up your hopes and dreams for an FPGA N64 and put them up in the attic for, I don't know, maybe a decade and then check back in.

- All right, so it's now August of 2023 and we have a functioning N64 core on the MiSTer, which is crazy.

I can't believe, like it actually really stuck up on me because you know, I gotta be honest, like after finishing that video, like I feel like Corey and I had an extremely all encompassing view of like what was possible on Mr.

At That Time.

And after finishing that video, we're just like exhausted and like kind of step away from a bit, you know, you run the update script, you know, every now and then, but like I had not really been paying that close attention.

You know, I'm like barely on social media.

I don't really check that much stuff.

You know, I need to be listening to the retro RGB podcast with more regularity than I do.

But like a lot of things like if like come and I'm like, wait, that's out now?

And I saw something about, I don't know exactly how you say his name, FPGA asmspouts.

- Oh yeah, yeah, yeah, yeah.

I don't know how you say it either.

- Whatever his username is.

I forget his real name off the top of my head, but you know, he's done a lot of crazy, crazy stuff that people would have thought would not be possible on Mr.

Like the PS1 Core.

And I saw that he was developing a software emulator, but that was designed to be like a reference for an FPGA emulator.

Like it was designed in such a way where it was really designed for hardware emulation and it would just be too slow to run on a computer, a software emulation, 'cause it just, it wasn't designed that way.

It wasn't designed for that.

It was reference for his FPGA emulator.

And I'm like, oh, that's really cool that he's got that going.

And I saw people not long after that say like, oh man, what do you think about N64 coming out?

I'm like, oh, it's, I don't think that's really happening.

Like he just made that emulator for future reference.

And then like, just a few weeks ago, a friend of mine who, actually one of the co-founders of the backlogery, who got really into Mr.

, was like, dude, we're like weeks away from Mario Kart being playable, Mario Kart 64 being playable on this job.

I'm like, what?

When did this happen?

Like, this like completely flew past me, and now I've seen these videos of like, You've probably seen something more recent than I have.

The last thing I saw was clearly Mario Kart functioning, but a lot of billboard textures were broken and stuff, but it was clearly basically working, and it's like I had no expectation we would get to this point on this hardware.

- Neither did I.

And I, so it's good for me from a personal perspective, but I kind of just left social media this year, and I just kinda only tweet out when a new article or podcast goes up.

So I've widely been disconnected from the retro scene, which is a lot of stuff happens on Twitter, like a lot of news breaks there.

And so I actually, I added Retro RGB to my RSS reader, so I kinda now I'm getting the news articles there and it helps.

- Good idea.

- But it's just like all of a sudden it's like, oh yeah, N64 core's like making really good progress.

Oh, N64 core's working, oh, textures are loading in, oh, this thing, this part of the N64 is working now.

The audio now works and it's like, he's just going so fast.

I don't get it.

It's, he's an animal.

- It's unbelievable.

And I'm sure like if there was, you know, I don't know, I mean, I'm not really a technical guy.

So, you know, when I said that it wasn't possible, it wasn't based on like, oh, I, you know, I know how many gates, you know, logic gates are on the N64 and how much you've got available on Mr.

And you know, oh, this type of RAM isn't going to really work for N64 because blah, blah, blah, blah, blah.

I don't know that.

I just know that because very smart people have said that.

- I thought the same thing that everyone was saying at the time, PS1 and Saturn are kind of the peak here.

Like it's as much as we can extract.

That at the time they were like, maybe 3DL, maybe.

And now we're getting N64, which truly does feel like, like there's no, obviously you can't go, you can't go past the N64.

- You can't get Dreamcast, there's no way.

There's no way Dreamcast is happening, right?

Right?

But then there's this whole, and you know, I actually have not really done any research on this, but like there's this whole Mars thing now.

- I haven't even heard of that.

- Okay, so there's something called Mars that is this, you know, that was just announced, that is this new, more powerful FPGA platform that, you know, I think some people involved in Mr.

are part of it and it's not, I don't think, I could be wrong, 'cause I've like, not really looked into this.

I don't think it's based around like, something like the DE-10 Nano, like a pre-existing board.

Like I think this is going to be like, bespoke PCBs with, you know, FPGAs and other hardware, you know, fitted onto it.

So it could end up being very expensive, I don't know, but, and I don't know exactly what it's going to open up.

But what I wonder is, you know, are there shortcuts that had to be taken with how, like, I shouldn't say shortcuts necessarily, but are there, you know, creative compromises that might've had to be made to squeeze like N64 into functioning on the DE 10 Nano with the existing type of RAM and stuff that a minster can use?

- Sure.

- Would you be able to, you know, maybe it would result in, you know, the same end result to the user, but could you possibly do something with a bigger FPGA or a different RAM configuration?

Could you do something that is perhaps more accurate to the original hardware?

I'm just spitballing.

I honestly don't know.

I don't wanna, I'm not trying to accuse anyone of taking like shortcuts with the current development.

I'm just, I'm speculating because I honestly don't know how it works and I don't know what the advantages of a new type of FPGA could be.

But I mean, this Mars thing, I'm sure it's gonna be amazing.

I can't wait to try it.

I'm sure it's going to open up a lot of more complicated arcade stuff probably.

But in terms of consoles, like, gosh, who knows?

But what we know now-- and I always like to emphasize this-- just because something new is coming out doesn't mean what you currently have suddenly becomes a bad product.

Like, people shouldn't feel like, oh, well, like, Mr.

Isn't worth it anymore because there's going to be this new thing.

Well, for one, some of the newer products could be more expensive, don't know.

And certainly what it missed or plays well now, it will always play well.

And not only that, with the RetroTINK 4K, as long as you have a good signal from the source, it doesn't matter if it was only outputting, it doesn't matter if like this new FPGA thing could do 4K.

You could output 720p from the MiSTer and get the exact same result from the RetroTINK 4K.

You could output the native signal from the MiSTer.

You could output 240p or 480i over HDMI to the RetroTINK 4K and get the same result.

Like that's what's incredible.

Like a big focus for my RetroTINK 4K video, I'm sorry for shifting off the topic from the MiSTer again.

- No, you're fine.

But a big focus for that episode is going to be on, 'cause this is why I've spent most of my time testing, just 'cause it's what's new and shiny, is the HDMI input.

- Yeah, that's what I wanted to really ask you about.

So I, again, everything's hooked up now, right?

So when I got a new job last year, and there was like a little chunk of a sign-on bonus, and I went to my wife and said, "Can I use this to buy an upscaler?"

" (both laughing) - And then I got the green light and I got the 5X Pro 'cause that was the thing at the time and it meets my needs.

- And will still be a great product because the 4K will almost certainly be a good deal more expensive.

It's still going to be a product that I believe is gonna be made and sold and supported because it's a different price tier.

Not everyone is going to, I mean, we don't know what the 4K is gonna cost, but it's probably gonna be-- - Under \$1,000.

- Under \$1,000, so we know.

And hopefully a good bit less than that.

Hopefully a good bit less than that.

- Hopefully.

- That's all we know.

That's all we know, but it will almost certainly be a good bit more, I think, than the 5X.

So, you know, people shouldn't feel bad just because the 4K is coming, right?

So, but anyway, I'm sorry to cut off your story.

- No, you're fine.

I don't feel bad.

I mean, I still want the 4K.

(both laughing) Because that, so setting all this stuff up and I've been, you know, I kind of, now that everything is plugged in, I'm like, all right, now's the time to update my PSTV and update my Wii U setup.

Actually, you're somewhere, in one of the Discords that we just happened to both be in, I think it was the RetroTINK one, you were talking about DS games on Wii U and someone mentioned new borders, and I was like, ah, now I gotta get these new borders installed, which is a whole process.

Talk about managing your files.

I had to FTP into the Wii U to like, I mean, it's nice, but it was a struggle.

- Someone was telling me that some of that DS stuff, homebrew stuff is weird on the Wii U.

My Wii U is not hacked, so.

- So I originally even hacked my Wii U because we're doing my other show, Chapter Select, season six is going on right now, and that's Pokemon.

And I was trying to figure out the best way to capture the DS Pokemon games and represent them in some nice way.

And I was like, well, the Wii U might be it.

So I was like, well, I'll just, I'll hack it and load the DS ROMs onto that.

And of course, out of the list of games that aren't super compatible or 100% compatible are the Pokemon games, of course.

So I went a different route there, basically just overhead camera shots where applicable, but then it was hacked and ready to go, and so now it's all set up again, and it was quite the dance.

And the Wii U scene has a new homebrew install method, so I had to like read, it's a whole thing.

You know what it's like.



Ah, what was I saying?

We were talking about the DS stuff on there.

Oh, HDMI, HDMI in and stuff.

So I'm putting it out to the Tink, And then I'm learning that the Wii U only puts out in the limited color space and over progressive, it was a little different in the Vita TV, same thing.

I've got it going into a converter box, but it's not looking quite the same 'cause the 5X only does like 1080i kinda, sorta, again, also in the limited range.

And so the more and more this HDMI port on the 4K is like, oh, this seems pretty good.

And so, you know, what?

I'm gonna play this clip too, which was in your, from 2020 in August, during the Uplink panel, your first panel for the Uplink event, you talked about kind of what you wanted to see next in the retro scene.

- But something I would really like to see is a nearest neighbor 4K upscaler.

- And we have it, we're here, we have two.

- Well, I mean, we're not, you know, I actually wrote, I've written in my RetroTINK 4K preview script, I said, to be clear, we're not there yet.

- Okay.

- This is a prototype unit, and we're just hoping that these devices release at the end of 2023.

- Sure, okay.

- Like the creators are hoping.

- Yes, we're close.

We're very, very close.

- But we're there, we're there, we are there.

And-- - So talk to me about this HDMI feature, 'cause I feel like this is the game changer.

- This is the game changer, I think.

It's what I've spent most of my time testing.

And kind of as a bridge from what we were talking about before about your old FPGA systems, as long as the core experience is good, as long as you were originally having good scaling, or at least good options for your scaling from the source, and you've got a low latency gameplay experience, the emulation is accurate, or whatever, As long as you've got a good experience there, you can make that experience as good as any other with an upscaler that is upscaling to your screen's native resolution.

And so for example, I've got the AVS, which is a 720p output FPGA system for NES and Famicom games.

I've got the Nt mini, which, and the Hi-Def NES, and the Inti Mini Noir, all of which are by Kevtris, and they all have slightly different capabilities.

You know, the Inti, the first Inti Mini, you know, is an FPGA NES, but it's very similar to the Hi-Def NES, which, by the way, I don't normally say NES, but that is what the creator calls the mod, the Hi-Def NES.

That's the HDMI mod for the original NES.

The Hi-Def NES- - I think it was talked about in RGB 101.

- I think, the high-defness?

- No, that was its own episode, 'cause that wasn't out yet.

- Okay, that you were, oh, no, I know what it was.

- That mod came out its own episode later.

- I think that video was, or in RGB 101, it was, people were taking boards from arcade cabinets.

- Oh, Play Choice 10, yeah, yeah, yeah, yeah.

- Okay, that's what it was, my bad.

- Yeah, so the high-defness, That video was actually the first time that I had ever realized the problem of shimmering.

Of uneven pixel scaling when the screen scrolls, if your pixels are not the same size, when the screen scrolls, you're gonna get the shimmer effect.

And so that was like the very first video has become my nemesis ever since.

- Shimmer.

- And it's still so amazing to me it's so many devices and so many retro game compilations and indie games, pixel art indie games come out and their scaling is uneven and you get this shimmer effect.

And I just don't understand how like the artists for these indie games don't tell the programmers like, "Hey, don't make my artwork look like crap.

Like scale this right.

" You know?

And so what interpolation does is it makes it so that if you aren't doing an integer scale, you can get what... with just a little softening to the pixels, you get what is perceived as evenly sized pixels.

That gets rid of the scrolling shimmer.

- Yes.

- So anyway, the AVS actually had interpolation patched in later, which was interesting.

The NT Mini kept Tris's first FPGA NES, and then before then was the HiDef NES HDMI mod that he made.

And it has very similar capabilities.

1080p output, you can size the vertical and horizontal however you want, but there's no interpolation.

So you have to do something like the HiDef NES can't do a 5X scale.

It can do a 4X scale, it can do a 5X scale horizontally, but your aspect ratio is gonna be kind of wide.

Or you could have a correct aspect ratio, but it's gonna shimmer.

Or then on the NT Mini, you can have a 5X vertical scale and a 6X horizontal scale, which is somewhat closer aspect, correct aspect ratio, not quite right.

You can eliminate scrolling shimmer that way, but again, no interpolation.

You can't totally, you either have to have a somewhat incorrect aspect ratio or you have to have shimmer.

Then the NT Mini Noir came out after the Super NT and the Mega Sg, both of which have interpolation.

So you can have an accurate aspect ratio with no scrolling shimmer.

So the NT Mini Noir has that.

But you know what?

It don't matter which of those systems you have because on the RetroTINK 4K, you can fix their problems.

If you want hard-edged, razor-sharp pixels, as long as you scale the source correctly and then rescale it correctly on the RetroTINK 4K, you'll have the exact same looking sharp pixels, no matter whether your original output was 480p or 720p or 1080p.

It doesn't matter if it had interpolation or no interpolation.

You can make it look exactly the same as long as you use the right settings.

And so in other words, here's something like the AVS, which is significantly more affordable than the Nd mini Noir.

- Oh, especially on the market price.

- Yeah, and you get a minimal latency, NES gameplay experience with either device.

You can get the same result from the MiSTer, at least visually, you can get the same result.

So it's this, it sort of seems weird to call an expensive device an equalizer, but it kind of is.

If you think about it, because you think of the value that it adds to so many devices that you already own, and the added longevity it gives those devices.

So if Analogue releases like a 4K Super NT, I mean, I guess that's cool, but if you have a RetroTINK 4K, like, who cares?

- Yeah, really.

- Right?

- It's.

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- So you don't have to keep chasing the next device.

or this Mars thing, say I'm scrolling through their Twitter and I don't know, it says 4K output for the 444.

I don't, it seems that's what they're implying or teasing here.

But if you have a MiSTer already and you get a RetroTINK 4K, you wouldn't, unless purely for visual quality here, - Purely for visual quality.

- You wouldn't have to upgrade to the next FPGA device, you could just keep using the MiSTer or your analog pocket, or your Super NT, or your PS3.

You know, you don't have to necessarily RGB mod a PS1, or not RGB mod, but HDMI mod something, 'cause you could use your PS3 if that, you know, suited your needs.

- Exactly.

- It sounds so cool.

- It's, yeah, and also like, you know, some of these modern pixel art games, You can pre-scale.

So you can use a feature called pre-scaling to set a lower initial resolution to then scale.

So let's say-- I mean, let's say we've got a game that's actually pretty respectably scaled.

It's an indie game or a emulated compilation.

It's got good settings.

It's using an integer scale.

Now, like if you're on a Switch, for example, maybe the scaling is designed for 720p, or maybe it's designed for 1080p.

So you might have to set your system a little different depending on the game, but you can pre-scale it, and you can fix games that perhaps had a blurry, like maybe they were this really blurry scale, and maybe you didn't like that.

Or maybe you wanna add like a CRT mask effect or a scanline effect, you can pre-scale it.

You know, if you were to just add scanlines to the raw 720p or 1080p source, their scanlines aren't gonna be in the right place.

But if you pre-scale it, like say it's a 240p game, you set your switch to output 720p and then set your pre-scale to 1/3 and you've got 240p now, your scanlines are gonna go in the right place.

So, and not only that, there are games that have uneven pixel sizing, that I have been able to fix by figuring out what is the appropriate vertical and horizontal pre-scale.

And whether you wanna play them with sharp pixels or whether you wanna play them with CRT effects, you have the shimmer fixed.

And that's been like a huge focus for me in my testing 'cause that's like, I feel like, I feel like that, Like, I don't know, like that's just like, I feel born till I test this stuff.

Like this is what I was meant to do.

Like, this is what I've been complaining about all these years, all these poorly scaled games.

Like, you know, we're good friends with Jon Linneman from Digital Foundry and like we've used with him.

Like we need to like develop like a standard, like say like, hey developers, this is how you should treat your pixel art.

- Yeah.

- And on top of that, I feel like we can, with something like the RetroTINK 4K, I feel like we can make a preservation argument for even if this is not exactly how you, the developer, want this game to be, to look right now, like maybe you have a reason for doing some sort of weird scale, or maybe you just really like the soft, blurry scaling, at least give us the option to scale things this way, because from a preservation standpoint, you in the future, if we get an 8K upscaler or other upscalers in the future, from a preservation standpoint, the more pure access you give us to the pixels of your game, the better we can make it look in the future.

Whereas if you kind of give us something that's a little screwy from the beginning, it limits our options for how we can improve this for future display technology.

- Yeah.

I just keep thinking about like how, I feel like the early HD era, that the PS3, the 360, and we'll throw the Wii U in there.

The Wii was that time, but not HD.

- Yeah, yeah, yeah, yeah.

I feel like that's kind of the landlocked generation.

- Yes.

- It was this step between the PS4, Xbox One, and PS2 and the Xbox.

And things are just stuck there.

And really right now, those stores are shutting down.

I mean, the Wii's been gone for a while, but the Wii U and 3DS just closed this year.

Sony tried to close the PS3 and the Vita, I think last year or the year before, but they at least-- -  
And there's games slowly going away from the service even though they didn't close the store.

- Yeah, things are just disappearing.

And then the Xbox Store is closing next year, the 360 Store.

But there's so many games on them.

And Xbox, they did their backward compatibility program for a few years, so there's at least an emulation option on official hardware, which is nice.

But the PS3, there is no way to play, well, outside of emulation on the computer, which I hear is getting quite good.

- My source for that would be John Leneman when he did his little video.

- Exactly, exactly.

Well, he's got way better GPU than I have, so.

- Way better than me.

And it's, this feels like the device, and perhaps the more 4K will be as well, that's kind of the other 4K scaler that was just announced.

We just haven't seen anything from it yet, so we don't wanna assume or say anything until we can see things, But this feels like a way to, it almost, it feels like the Framemeister was, for you guys to the NES and the Genesis and stuff, bringing those old consoles up to modern flat panels of the time, it feels like we're having that moment again with now modern 4K OLED flat panel TVs now and the early HD consoles that were 720p or 1080i and 1080p.

It's like, it feels like that moment again to me.

Is that, do you feel that way?

- Yeah, I mean, we're finally getting the tools to do something with those systems.

Something really effective, I think.

You know, I'll be honest, like the distance that I sit from my TV, you know, the LG C1 handles, especially if you set your, if you label your input as PC on the C1, you know, 720p and 1080p are handled relatively cleanly.

And, you know, I sit about eight feet away from my screen.

I don't see like a massive difference with like 1080p or 720p.

I mean, especially 1080p, it's a little hard to tell the difference between like the nearest neighbor scale and just my TV scaling.

720p, I can tell the difference.

But, you know, it's also like, you know, it's just such a better way to capture this stuff.

and present it online, it's a better way to preserve the core visuals of those games, I feel.

I think a lot of people are going to say when they see, like, PS3 games upscaled, though, I think they're gonna say, like, "Oh, well, it just makes the aliasing more visible.

" And you know, I mean, you know, there's the whole, like, there's the M Classic, of course.

I don't know where you stand on the M Classic.

It's not a tool for me, I don't think.

Yeah, same with me.

It does something, though.

It does do something.

It does.

Yes.

But my perspective on it is if you look at a still screenshot or just, you know, a still screen in a game where there's not a lot moving, like, yes, I can see some areas are smoothed over, that there's not as much of a stair step.

But here's the thing, once that image is in motion, there's still this, like, the warble to, like, the aliased edges.

It just, it warbles in a different way than it does without it, but it still warbles.

That's just my perspective.

Like, I see that and I'm like, I don't see this as effectively less aliased when the game is in motion.

Like I still see like, you know, low details or sparkly effects on like, you know, something that might be on the character's clothes or something like, like it just doesn't look that different to me.

And so from that perspective, I don't think, you know, like those generations, like had either very little or very rudimentary anti-aliasing techniques.

It wasn't really until like the middle of like the PS3 generation that you started getting more like really clean like temporal based like anti-aliasing solutions.

So that's just how those games look in that generation.

And in a lot of ways I feel like it helps to just lean into it.

Like that, like instead of like trying to fight it, just lean into it.

Lean into how those games look.

Lean into the look of that generation.

But of course things are more complicated now that we've got, like, a lot of games with dynamic resolution scaling.

A lot of people are like, "Oh, is Tears of the Kingdom gonna look better if you set it to 720p instead of it going between all of these different resolutions?"

" I don't know if I really agree with that.

I think it looks fine at 1080p.

But... I haven't played yet.

It came out right before we moved.

Oh.

It's just like, when I play Zelda, I need to just commit, you know?

It's gotta be the game I'm playing, and I'm just not in the spot right now.

I want to, though.

I don't know if I've ever played a game where I felt like that awake and alert the entire time I played it.

Like I was never like, "I'll just go to bed.

" I just didn't feel sleepy ever played it.

Like I was just like constantly compelled.

- It's so tempting.

It's just looming there.



Like, and not being on social media this year is actually really good for me because I've seen nothing.

I've seen the official Nintendo trailer and that's it?

So the game is still a mystery to me, which I really am excited about because that's the fun and the Zelda game is learning the land and discovering it.

But I bought everything though, try.

I bought the Switch, the collector's edition, the controller.

So I have all the Zelda stuff just in my face constantly.

Like I get to, I promise.

- I finally gave into the OLED as well.

Like I didn't, I know I'm not going to buy a Switch OLED.

I'm going to wait for, you know, the Switch 2 or I go away for the next official platform.

I can hold out for it.

I can make it.

Then the Zelda Switch came out and I'm like, fine, I'll get it.

- I knew it.

- Well, okay, I have to confess, this is my third OLED.

- Oh, okay.

- I got the original one year.

I was like, I want the OLED screen.

I like OLED technology.

It reminded me of the Vita, near and dear to my heart.

And then they announced the Splatoon 3 OLED, and those Joy-Cons spoke to me, the translucent plastic on the back, the purples and stuff.

I was like, I'll sell the other OLED and just buy the Splatoon.

And then they did the Zelda one and I have a sickness.

Like most, I think game collectors that love Zelda have to get whatever they do with Zelda.

So, but I sold an old phone to get the OLED for, so that was, you know, nothing lost there, but.

- But you know, I think that game was, - You know, I play Switch quite a lot.

I, you know, I'm a Nintendo guy at heart, you know, I, you know, the Switch is never like that left unplayed for that long.

And I tend to be, you know, prefer to play on the TV versus on the screen guy.

So, you know, I have realistic expectations of what Switch games look like on my TV.

Like I'm under no illusion of that.

And I think for a lot of people, Tears of the Kingdom was this big like event game that brought them back to their Switch, right?

And I saw a lot of people be like, "Ooh, this looks so bad on my 4K TV.

" 'Cause I think either they hadn't played a lot of Switch on the TV since they got a 4K TV, or they just hadn't played like a AAA style Switch game in a very long time.

especially in docked mode.

And I think it was this big, like, oh my gosh, this looks so bad compared to my PS5 or my Xbox Series X.

And people were like, oh, we need that new Switch now.

And you know, I actually had the reverse reaction.

It was kind of funny because for the longest time, I was like, man, you know, I'm gonna get, you know, the sequel to Breath of the Wild, you know, 'cause it was just like Breath of the Wild 2 for a long time.

I was like, I'm going to get that day one.

I'm going to play it day one.

I know I'm going to love it, but I'm just like I am not excited to play, you know, a game that is very similar to the previous Zelda game on the exact same hardware that I played that game on.

Like I want, if it's going to be a similar game I want to be, I want to play it on the new Switch.

I want to like be something that can push things forward.

- It kinda like, like Breath of the Wild was, a Wii U and a Switch launch, it's like, we're gonna play it on the Switch, or Twilight Princess, we're gonna play it on the Wii.

- Yeah, yeah, yeah, and you know, Digital Foundry kept doing the too big for Switch joke, right, but like, I knew it wasn't like they were gonna cancel it, I was thinking like, oh, I bet they'll do the same thing they do with Breath of the Wild, release it on Switch, and Switch 2, and it's gonna be like so much better on the Switch 2, and that's when I wanna happen.

And, but in the end, I was actually like, you know what?

I am glad this ended up being just a game for the Switch, because I am so, like, it's very easy for me to put games in context.

That's why I can still look at an NES game and be like, oh my gosh, I can't believe, what?

- That's crazy if they did that on NES, right?

Like I can look at an NES game and still think it's like beautiful, impressive, and blow my mind.

And it's not hard for me.

Like I think a lot of people struggle with that.

There's like, oh, well, we've moved on to, you know, 4K 60 frames per second.

- Old game old, you know that.

- Old game old, I can't go back to that now.

And like, it's very easy for me to put things in context.

And when I saw the things that they were pulling off, the sheer audacity that they had to have the gameplay mechanics that they have in this game on Switch.

It's like, are you guys nuts?

And yet, they pulled it off pretty darn well.

Like yeah, the game has some frame drops, but it's never in a way that is like especially obnoxious or obtrusive to the gameplay.

Like by and large, the game is pretty stable.

It is 60 frames per second target.

I know what a dynamic resolution Switch game is going to look like on my TV.

I'm under no illusion that it's going to look like a PS5 game.

So I was actually glad, contrary to how I'd been feeling during the whole lead up where I was like, "Man, I wish they'd just hold this back for the next system.

" Once I played it, I'm like, "I am so impressed that this is a Switch game.

" And that increased my enjoyment of it.

But that's a long tangent to say, I think that game was a game where a lot of people, not necessarily me, but a lot of people were like, we gotta do something about how these games look on 4K TVs, right?

- Yeah.

- And I have played Breath of the Wild through the RetroTINK 4K.

I've tried, I've experimented with downscaling.

I've experimented with adding scan lines and different softening filters.

And Mike is saying that he wants to have more different options for smoothing than what's already there.

I mean, you know how the 5X has gone.

I'm sure there's going to be a lot of new features and stuff between now and launch and even beyond launch.

So when he says he wants to do something, I believe him.

But I've experimented, but I haven't really settled on anything where I'm like, yes, this This is clearly a comprehensive improvement to the game, but again, I know what I'm looking at when I look at a Switch game on my TV.

I didn't find anything that was like, "Yes, this is definitely better for Tears of the Kingdom playing it this way.

" But some people might try like outputting it at 720p.

They might try different vertical or horizontal filters.

They might even try, there's an effect that you can make.

Like if you're outputting 720p, you can like have like this LCD overlay that makes it look like your 4K TV is a native 720p TV.

Like it makes like the pixels all be nestled cozily within their own little part of the pixel grid, you know, that makes it look like, you know, 720p TV.

So, you know, some people might really like that.

I don't see myself doing that with like 720p games necessarily, but a lot of people might really like that.

I really like how they look with Nearest Neighbor.

You know, I actually just played through Nier Automata, PS4 version on PS5.

I played through the whole game.

Well, I started.

I maybe played like four hours before I got my RetroTINK prototype, but I just used nearest neighbor scaling and the HDR effect, because I think the HDR injection it does is so much better than what PS5 does with... - Oh, because PS5 has that just like auto HDR everything.

- If you play a game that does not support HDR, you can have the PS5 output it as HDR.

But the control the RetroTINK gives you over how many nits and the gamma correction that you might need for black frame-- compensate for black frame insertion and stuff like that.

Because Neo Automata, it targets 60 frames per second.

Doesn't hit it on PS4 or PS4 Pro, does on PS5.

So I was able to play on PS5 with black frame insertion, which increased the motion clarity significantly.

And thanks to the RetroTINK, it was really the HDR that made the experience more so than even the nearest neighbor upscale.

Because, you know, again, I'm saying far back, it still looked pretty good even without that nearest neighbor upscale, right?

But the HDR made it so I could make the picture just as bright as if I wasn't using black frame insertion at all.

So that was actually a major enhancement to my experience in a game that you might not think of as a game to use with the RetroTINK 4K and on a system that you might not think to use with the RetroTINK 4K because that game is only 1080p anyway, right?

But I output the PS5 as 1080p to the RetroTINK 4K and I was able to get benefit playing a relatively modern 3D action game.

Yeah, it's actually.

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it makes me just think, like, what needs to be plugged into the Tink?

What's this daisy chain of cables?

When do you take the PS5 out of the TV and put it into the Tink or the Xbox Series X?

When does that, putting it down to 1080p but then using the Tink to upscale it, when does that.

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I mean, you know, I've been thinking about how like the Series S, even though like I feel like of all the consoles that exist, like the Venn diagram of the Series S target audience and the RetroTINK 4K target audience is probably the smallest overlap of like any system, but at the same time, I think they're great partners because Series S games are gonna be rendering at a much lower resolution.

You don't lose that much outputting them at 1080p, you know, or even 720p maybe.

There might be some interesting things you could do with that.

Plus, like think of all the Xbox 360 games you could play that way.

Most of those don't have a 4K upscale in backwards compatibility mode.

Most of them are still 720p.

So set your Series S or Series X to 720p.

You can get a great experience with, on those new Xbox systems for those Xbox 360 games, you get a smoother frame rate than you would get on original hardware, but you can upscale that original resolution in a way that looks really, really clean.

- Man, it sounds so crazy.

It just sounds nutty.

Like the HDR combined with the slot mask to, you know, one day, one day our tube TVs won't work very well.

Like my, you know, I have a Trinitron over here and I can't find anyone locally to come in and calibrate it and I'm too terrified to open the thing up to try and do anything.

And so, you know, I've got, you know, it's kind of squiggly up at the top and there's some rainbow color blending things.

It's just not center, you know.

You know how it goes.

And it's like, well, eventually one day it just won't turn on or something will truly be wrong with it and I'm really gonna be stuck, but I've, these tools, even just the 5X Pro or the MiSTer, really feels like it's giving me the tools, the means to capture the way I remember these games looking, or how the games were supposed to look.

I think one of the most compelling images that I've ever seen, and I think it gets passed around quite a bit, WobblingPixels, over on Twitter, he did the-- - Who has a RetroTINK 4K prototype as well.

He does.

He's one of the people, you know, you got to see everyone in the tink who's got them, you know, through these mythical like foot long boxes that are floating out there.

I have a feeling your next three podcast guests are going to be some of these people.

I would love I've been thinking about reaching out to Mike maybe, but he's just seems so busy.

I don't know.

I would love to.

But so Wobbling Pixels did this comparison of here's raw RGB scaled output of like Castlevania and Dracula's face.

And then he shows you it on a CRT and just the detail.

There's detail that's lost when you don't have the scanline the way it was intended, which is that artist.

That's what the artist was doing, right?

You know, like Dracula's eyes like bleed out to look this red wideness, but it's really just one little red pixel.

And scanlines have notoriously never really quite looked right, kind of I I think up until these last couple of years.

But now, I feel like we're getting really close to accurate CRT visual replacement.

You know, because PVMs and BVMs just get more and more expensive every year.

I really miss the boat on that.

And CRTs, same as well eventually.

I saw a dinky little, I don't know, nine inch, just regular consumer CRT at a store for like 60, 70 bucks.

You know?

That's not, you know, and it's also how most people know how to hook up these old consoles, right?

Because more and more modern TVs are dropping analog, even just the ability to buy adapters to plug in analog stuff.

So an upscaler, the Tink 4K, the 5X Pro, the Morph, the 2X, whatever, whatever scale.

If you really wanted to buy a Framemeister today, it solves almost, it solves so many problems or just solutions, ways to hook up old hardware to modern TVs, make it look good.

But also it's kind of like you said with the backloggery videos at the beginning, we capture all this footage in really high quality and then we're gonna dumb it down to VHS.

- Yeah, yeah.

(laughing) I mean, but you know, it's really that, like for me, the big step forward was black frame insertion and HDR, I think, because, you know, I can do black frame insertion on my LG C1, and that was, you know, even though it makes the picture darker, when I saw like scan lines through the mister on the C1, I was like, I start to see the appeal of artificial scan lines.

Like, I've always liked scan lines on real CRTs, but on modern TVs, like, you see them, but then when the image is moving, like, they kind of blur, and black frame insertion helps give them that stability that they need to have the intended effect, I think.

And then, you know, but then, of course, scan lines make the picture dark, black frame insertion makes the picture dark.

HDR that we're getting on some of these devices now.

And to be honest, I have not really tested HDR that much on like the RetroTINK 5X or the Mr. or like the Pixel FX mods.

They have HDR now as well.

I've not tested that feature that much, but I've tested a lot on the-- - The Mr. has HDR?

- I think, I think it added that at some point.

- Oh my gosh, that would blow my mind.

- But-- - I have tried it on the 5X, but it's-- - I think there might be some caveats-- - I think it's only HDR10.

I know that because it pops up when you switch it in the LG, the C1, it pops over.

And I think HDR10 has some limitations, like it's not that full-blown HDR.

- Well, it is HDR10 on the 4K as well, but I think it might be-- - There is a difference.

- It might be at a fuller bit depth, I think.

So you might have more accurate color translation and less risk of like adding like banding artifacts or anything like that.

I think, I think that might be, I could be wrong in this, but I think, but I've not, I've not tested those features on that, those that much.

But now that I've seen like HDR on top of black frame insertion and, you know, these CRT simulation effects, it's like we really are pretty much there where like the need to get a CRT to experience some of this stuff is like diminishing more and more every day.

The one thing that I think, and I was experimenting with this a little bit today and you can get some, you can get a pretty good look on the RetroTINK 4K, I think, but like PS2, 480i stuff.

Something about the way that is on a CRT is just like magic to me.

And I used to not like it, but then, you know, I learned to embrace what 480i looks like on a CRT with the interlacing and something about, I think just like the way the fields alternate and the rate of the phosphor decay or something, like somehow just makes it almost look like there's so much more detail than there actually is in the signal.

Like it's just, you know, I've been playing, me and a friend have been playing through Baldur's Gate Dark Alliance 2 on the PS2.

And like those games are so clean.



If I'm not mistaken, they actually are derived from a 720p frame buffer internally before being output at 480i.

And they look, on a PVM, they just, they look so clean.

Just the visuals look so clean, so crisp, so much detail.

And I feel like no matter what deinterlacing technique you use, that feeling doesn't quite translate when upscaled.

But that said, I was trying like an RGB slot mask on the RetroTINK 4K with my PS2 today.

And I'm like, "Mmm, you know, that's getting there.

That's getting there.

Maybe 480i is pretty good on here too.

" That's music to my ears.

So, yeah, I mean, we are definitely getting to a point where, you know, I love playing on my CRTs, but it's nice to know that we're we were getting these replacements.

It's not just because of the technology.

It's also just because of the pure dedication of the people like observing this stuff and, you know, making sure that it's done in an accurate way.

And also the fact that he has sent this out to, this prototype out to several people who can provide very useful feedback to make sure that this is hitting, you know, exactly, you know, on the marks that it needs to be.

to be.

- Yeah, I actually, I really, really respect that.

And I think it's really cool to see what each of you is doing with it.

You all seem to have a different approach or angle to it.

- Yes, yes.

- Like John Lenderman, he tweeted out, I do remember this 'cause it was kinda like the early buzz of the announcement.

So I was like, what's going on?

And he was like, with the HDR, I can make, and Scanline, like I can make my OLED match my BVM identical.

Just-- - That was right after I told him about it.

I'm like, dude, have you tried HDR on this thing?

- It's crazy.

- He's like, no I haven't.

And then like within an hour later, I saw that tweet.

(laughing) It was like, holy crap, you're right, this looks amazing.

But also like, you know, like, you know, you've got Firebrand X who is like, I, you know, I've been in some group chats with him as he's been going through this.

And like, he is just, his process is so painstaking.

Like he, and not only that, he has given so much feedback to Mike that has allowed him to, you know, optimize how certain aspects of the scaler work and how the crop function works and stuff like that.

So that's, his feedback has been really valuable to the development of the device and also the development of these profiles that are just like, like I think I told you I got my Super Famicom back from Voltar the other day with that new mod and it's like, it almost looks like a digital source with FirebrandX's profile.

(laughing) The presenting 4K, it's incredible.

And, but so he, Firebrand X is doing that pixel precision stuff.

You know, Joe from Game Sack is really good at paying attention to like audio details.

John Linneman has been testing like a retro PC stuff, which, you know, runs at weird resolutions and you know, wobbling pixels and all these other people are testing all this other stuff.

I know he's been messing around with like a lot of PS2 games and stuff.

And I've been just like obsessed with, oh my gosh, I can take these games with bad scaling and I can give them like really good scan lines or I can fix the shimmering.

Like, so we've all like had different areas of interest.

And Mike is like, like, I, like, I don't think he had any clue what anyone would, like he didn't request like, hey, can you, I'm sending this to you so you can check out this.

Like, he's just let us freely check what we want and not only check what we want, but like share it with people.

Like he's not afraid of us like.

- It's a very open development.

- Yeah, it's been great.

And so we've just kind of latched on to what has interested us.

And he was like, I'm really glad you're checking out all these modern HDMI systems, 'cause that's something that I know much less about, just less familiarity with the games and the ways that things might be output on them are the ways that some of the HD retro compilations might be upscaled.

And so like, he was telling me yesterday, like, hey, I think I'm gonna tackle some of the suggestions you were making about having like a more granular pre-scale.

I think that's gonna be what I'm gonna tackle next.

So I think all this is going to lead to a really polished product when it's actually available for real.

So, and hopefully we're gonna make a good collection of profiles and, you know, like I just wanna make a preview video 'cause I'm really excited about it, you know?

I'm really excited about what I've been able to do with it.

So it's like, I've been so busy wrapping up a non-My Life in Gaming project for like the past month.

And I finally wrapped that up about a week ago.

And I was working late nights.

I was working till like 10 or 11 o'clock at night.

And I was still like, even that late, I was just like, all right, time to go downstairs and test stuff on the RetroTINK 4K.

Like, I was genuinely having as much fun doing that as I, or maybe more than I would if I was like, you know, I should get back to one of the games I was trying to play through.

Like, that was what I wanted to do.

Like, I was having fun.

And I was like, every game I was popping in, I was like, oh, I think I figured it out.

I think I got the pre-scale just right and the scan lines all line up with this "Aw man, look at this!

" - Oh, it looks so good.

- So, it's probably the most fun I've ever had, like actually just testing a piece of hardware for making an episode on.

Like, it's just been fun.

- That's what it should be, fun.

It should be fun.

(laughing) - Sometimes, sometimes it's, - Oh, I'm sure.

- It's, you know, you're maybe, maybe grueling, you know, it's a little grueling going through some things, but this one has just been fun.

- Good, I'm glad to hear it.

Did you, do you ever think that, you know, starting this YouTube channel, this, you know, you wanted to do this from the idea of, I'll make my own 3D characters in my own little home star runner world, to I should do a YouTube channel, to finding a friend like Corey from the back loggery, to now you're essentially, while you're not a developer, and I'm not either, you're actively helping develop a piece of technology, one tool of many, hopefully, that really I think is gonna help define and shape playing retro games on real hardware at least, you know, for the next decade, kind of like the Framemeister has.

But really, the Framemeister kind of was, had its decade, you know, well, there was the OSSC and thing, but it feels like the Tink 4K, and let's just assume the more 4K kind of falls in a similar camp, a 4K scaler at the very least.

These are the devices that are gonna help, it's gonna shape the way you produce your videos, it's gonna shape the way we look at and talk about games, it may shape the way mods are built.

How do you feel, I mean, from, I'm gonna do 3D animation stuff on YouTube to this.

I mean, how's it feel?

- I mean, it's, you know, you, things never go in exactly the direction that you envision, but when you look back, you see the threads that led you there.

Like, you know, I remember, you know, setting up my, you know, Ninja Turtles action figures on the coffee table and taking Polaroid photographs of them.

Of like, you know, I would, I'd call it a setup.

You know, I'd make a scene with the characters posing in a certain way.

Well, I'm effectively, I'm still taking photographs of my toys, right?

I guess what I'm still doing today, right?

And you know, I remember, you know, I didn't have anything better than a TV with RF video until college.

And, but even still, I remember loading up, you know, Super Nintendo games and NES games on my TV and getting colored pencils and graph paper and knowing like there's pixels behind there.

Like I know they're there and I want to, it's really fuzzy and hard to see, but I want to translate those pixels to this graph paper as best I can so I can recreate these characters Mario Paint, right?

So, you know, you look at those things and like, these are the things that you were drawn to so long ago.

And even though the path toward your future didn't always go in the direction that you directly envisioned, when you look back, you see like, well, you know, all these things I did as a kid, all these things I did in high school, these things I did in college, they prepared me for what I did now and like kind of, I guess, establishing and sticking with, stubbornly sticking with my passions.

I mean, I gotta be honest, I really struggle with things that don't interest me.

(both laughing) So I don't know if I had a choice to do anything but video game stuff, you know?

(laughs) Yeah, I know exactly what you're talking about.

Oh my goodness gracious.

Well, I think that does it for this episode of Next Week at Superstars.

I warned you!

I warned you!

I was gonna ramble and this was gonna go much longer than you're used to.

I love it.

I could keep talking about and I would love to talk again someday, but I think that wraps it up for us.

So, Mark, try, my brain's confused sometimes, 'cause your name is Mark, but your videos, it's always, we talked about this before the show.

- Yeah, it's what I've gotten stuck with on the internet.

- That's okay, yeah.

Well, Mark, where can the people find you online and check out all your work?

Obviously, my life in gaming.

You pop up on Digital Foundry every now and then.

You're over there with John.

- Yeah, that's right, yeah, yeah.

We've done some collaborations with Digital Foundry.

You know, I really, I've been enjoying doing the Let's Plays with John Leneman.

Those have been fun.

We just released one on Sonic 06.

- I watched that today.

What was this?

What did Sonic say?

It's no use.

- It's no use.

It's no use.

Yeah, that was, you know, to be honest, we recorded that back in like March and didn't actually get it edited until very recently.

So when I was going through that, I was like, man, like I forgot how funny this actually was.

It was actually pretty funny.

But yeah, so yeah, sometimes appear on Digital Foundry.

You know, in addition to my life and gaming, you know, we do our videos when they come out.

We live stream every Sunday night at 8 p.

m.

Eastern time until about 11 p.

m.

or so.

And the backloggery, I stream on the backloggery channel, Twitch channel, twitch.

tv/backloggery at 7 p.

m.

Eastern on Mondays until about 11 p.

m.

or so.

And yeah, since as I said, I'm not really on social media, that's about where I am.

(laughs) - That's good for me, man, I love it, I love to see it.

So, everyone go check out My Life in Gaming, for sure.

Like, I've been watching, like I said at the top, for nine years, going on 10, baby.

And every video's a treat, man.

When it pops up, I'm like, "Yeah, let's go!

" And they're always like, long and meaty, and they're so interesting.

Like, even the most recent one up there is, that was a Cory video, for sure, because it was all Cory.

- The V-Ture AR glasses, or XR, or whatever they call them.

- Yeah, the thumbnail, hilarious.

- Oh yeah, oh yeah.

We normally don't do thumbnails like that, but we're like, let's just do it for this one.

It's too funny not to.

I mean, the best thing about that whole video was, like, he hated that video, and I was like, dude, it's funny.

I think this is really entertaining.

I enjoyed watching it.

He just, he was really annoyed with it.

He was just like, ah.

It's not interesting.

People aren't gonna like this.

This is gonna be what they're expecting after it's been such a long gap in videos.

But like, I thought it was very well made, very entertaining, and hey, we got some top, top class emotes for our Discord and for our YouTube streams, stream chat.

Like we got some great, like that was the best thing that came out of is, is all the emotes we got out of it.

So, you know, it's, and I do promise that, that from now to the end of the year and going forward, it's, you know, sure, there might be some gaps between videos, but it's not gonna be like it has been this year.

We're turning things around.

Like I said, I got my big project out of the way and it's kind of, it's been RetroTINK 4K all the time for me until that video is out.

So, and then it's gonna be back to Analog Frontiers.

- I can't wait to watch both of those.

You know, maybe Analog Frontiers will be out close to when the Tink 4K actually launches, maybe.

- Yeah, that's the goal.

- All right, I believe in you, absolutely.

For me, if you'd like, you could check out my other podcast, Chapter Select, where Logan Moore and myself, we bounce back and forth between a series of games, exploring their evolution, design, and legacy.

Right now, season six is going on, and we've got the Pokemon, mainline Pokemon games, which I really hadn't played all but two of them, So it's been a very interesting season to explore.

I think this upcoming Wednesday will be the next episode, which is gonna be Pokemon Violet and Scarlet.

So you can check that out wherever you listen to podcasts or here on YouTube.

There's also Super Chapter Select, which gets you access to longer episodes and exclusive bonus content like our battle series.

We're battling in every Pokemon game along the way as well.

So you can check that out over at listeningwithsuperpower.

com.

It's just two and a half bucks a month or \$20 a year.

You can check that out.

But also, this episode, we're recording this at the end of August, so September is right around the corner.

And September is Childhood Cancer Awareness Month.

And the fine folks over at Relay FM, a podcast network, they every year get their community together to raise money for St.

Jude to help, and childhood cancer, and research and development over there.

And so as a part of that this year, I'm gonna be streaming every Thursday night at 7 p.

m.

Eastern.

All the Mario Kart games, gonna work my way through every course, every cup, every track, through every Thursday night, chip my way through those games to help raise money for St.

Jude and the fine folks over there.



So if you could come check that out, that would mean the world to me and I imagine the kids as well.

But thank you so much, Mark, for joining me this evening.

Until next time, folks, adios.

That was an absolute treat.

I felt like I got my own little private episode of my life in gaming there.

(laughing) So good.