Twitter Thread by byuu



byuu
@byuu_san



So I was thinking about yesterday, and what it's safe to talk about with respect to work. I'm gonna take *some* risk here, but ... essentially, I'm not a ROM hacker or an emudev. Those are hobbies. My specific talent is reverse engineering, which is a much more broad category.

Not all ROM hackers are reverse engineers. There are level editors, generic compression tools, script editors, hex editors, etc that can be used. Most emudevs are also not reverse engineers; instead they rely on documentation, test ROMs, and emulator source to make their emus.

In fact, that's how I made all my other higan cores. But my fan translations, and bsnes, that was reverse engineering. I have taken apart a good 30% of Bahamut Lagoon and completely replaced entire menu systems with my own code. When I started on the SNES, ...

The information was just *barely* past what the SNES developer manuals contained. I took us from opcode-accuracy to sub-cycle accuracy (clock edge accurate.) Every emulator since was based on bsnes: Super Nt, MiSTer, Mesen-S, etc. They all used my code and research.

But what got me noticed was reverse engineering the NEC uPD and contributing that code to Stephen Hawking's voice emulator. My hobbies, unfortunately, are just not profitable. Only Yuzu can earn money like that. What the head hunter wanted with me was reverse engineering mastery.

I don't know how they did it, but their petition for me got my visa application approved so fast my immigration lawyer said it was the fastest approval their firm had *ever* seen, and I got a 3-year visa on my first try, which is practically unheard of.

If I were to have a college degree or if I had passed the JLPT then, I'd already have permanent residency. As it stands, I'm on course to apply for the HSP visa in one year, and I should have PR in two with any luck.

I can't share what I am reverse engineering, but I can say that it's white hat. It would have to be to get the visa approval. Maybe one day after I retire I'll come back and share what I've been working on with everyone. But it's really, really cool stuff that I'm very proud of.

I work for an amazing company with really great co-workers. The opposite of a black company. I wish them the best and I'm doing everything I can for them. They're very happy with me and extended my employment contract, and I'm very happy with them. That's about all I can share.

I'm embarrassed that I let some asshole online destroy my self-worth and ruin half of 2020 for me. But everything that we survive only makes us stronger. I'm proud of who I am and how far I've come, given I started with nothing and no one to help me. I'll be just fine now <3

Anyway, what I'm specifically good at is pattern matching in very large data sets and ruling out multiple alternatives to finding the original operation. I'm *extremely* focused and though I certainly used to complain a lot in 2010 when bug hunting bsnes -- I never give up.

I spent two solid weeks on Speedy Gonzales after two solid weeks on a tiny 1/10,000,000th of a second timing difference regarding SNES IRQs. I never failed once. There wasn't a single SNES behavior I gave up on. That's what makes me valuable.