https://cprimozic.net https://github.com/ameobea

Work Experience

Detailed listing on LinkedIn: https://www.linkedin.com/in/casey-primozic-1712a3120/

Osmos | Full Stack Developer | Mar. 2020 - Jun. 2024

- Contributed to every part of Osmos's software stack, growing the company from pre-revenue to a mature series A-funded startup with many paying enterprise customers
- Built a complex distributed data ETL pipeline from scratch in Rust, processing up to billions of records/day
- Headed development of Osmos's core data transformation builder UI, capable of rendering millions of cells with sophisticated styling and logic performantly in the browser

Stackline | Full Stack Web Developer | Feb. 2019 - Mar. 2020

- Built out Stackline's two flagship software offerings consisting of advanced data-driven UIs in React
- Modernized and optimized backend services to reduce cost and improve response times for users

Trabian Technology | Full Stack Developer | Aug. 2017 - Apr. 2018

• Worked part time on client websites and mobile apps for banks and credit unions in React + React Native

Education

Valparaiso University

Bachelors of Science in Computer Science - Presidential Scholarship - Graduated Dec. 2018

Programming Languages + Technologies

- Diverse experience building, deploying, and maintaining full stack web applications from scratch
- 8 years of Rust experience (4 years professionally), 10+ years of JavaScript/TS + React experience
- Extensive experience with various databases, Kubernetes, GCP/AWS, Python ML/AI libraries, low-level optimization, shaders + 3D rendering, and whatever tool or technology solves a problem best

Notable Projects + Accomplishments

Full list on my website: https://cprimozic.net/portfolio/

Robintrack | https://robintrack.net | Apr. 2018 - Aug. 2020

- Website that I built + maintained which tracked trends in retail trading on the Robinhood stock brokerage. Received significant media and institutional attention during the Covid pandemic
- Peaked at over 350k visits per month and up to 1,500 concurrent users
- I appeared in multiple live TV interviews for CNBC and Bloomberg talking about the site and the data.
- Site and dataset cited in dozens of academic papers: https://scholar.google.com/scholar?g=robintrack

Web Synth | https://synth.ameo.dev | Sep. 2018 - Present

• A fully-featured browser-based digital audio workstation including synths, DSP effects, a MIDI editor, sequencers, signal analyzers, and much more. All built from scratch with Rust, WebAssembly, TypeScript

Music Galaxy | https://galaxv.spotifytrack.net | Aug. 2021 - Oct. 2021

• Interactive 3D visualization of the relationships between over 70,000 musical artists. Built from an embedding I created using data from Spotify's API. Runs performantly even on modest mobile devices.

Notable Writings + Blog Posts

Reverse Engineering a Neural Network's Clever Solution to Binary Addition - Jan. 2023 561 points on Hacker News

<u>Speeding Up the Webcola Graph Viz Library with Rust and WebAssembly</u> - Jul. 2021 218 points on Hacker News

<u>Self-Hosting Dozens of Web Applications and Services on a Single Server</u> - Dec. 2021 511 points on Hacker News