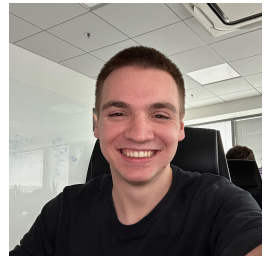


Hugo Luccarini



hugo.luccarini@gmail.com

Employment

Rust Software Engineer at Thermo Fisher Scientific - Brno, Czechia

2024 May - Present (Full-time)

- Working with modern Rust including async, tokio, tonic, and other industry standard libraries.
- Interacting with scientists and engineers to produce high quality sample analysis software for Electron Microscopes.
- Rewriting legacy C++ code into Rust while adding additional features such as a higher throughput of data.
- Maintaining and bug fixing a large, complex C++ / Rust codebase.
- Enabling our team by improving GitLab CI and Docker environments to streamline builds, testing and deployment processes.
- Effectively using AI tools to boost productivity and efficiency.

C++ Software Developer at Genetec - Vienna, Austria

2021 June - 2024 May (full-time)

- Designed and implemented the backend infrastructure of video processing applications to consume existing C++ algorithms by C# in Linux-based Docker containers.
- Developed and maintained high-performance components for real-time video analytics.
- Managed cloud-based microservices, including being an 'on-call' engineer during out of office hours.
- Applied Agile and DevOps practices and methodologies in our work, I had extensive training regarding how we work.
- Collaborated and travelled with international teams in Canada and Europe regularly.

Full Stack Engineer / Co-Founder at Snax - Whistler, Canada

2019 June. - 2020 July. (part-time)

- Start-up online on-demand grocery delivery store where I developed the technical infrastructure. Including a complete frontend with React, TypeScript, HTML, CSS and backend with Node.js, MySQL, as well as a frontend
- General activities such as designing, legal, and marketing.

Education

Bachelor of Computer Science - Deakin University, Australia.

2019 July - 2023 January (Part-time)

- Teamwork including collaboration and doing presentations from various group projects.
- Developed time management skills - study was part-time whilst simultaneously working full-time.
- Learned a broad range of technical skills, including C++, Java, Python, Networking, Machine Learning..

Technical Skills

- Languages: Rust, C++, C, C#, TypeScript, JavaScript.
- DevOps: Git, Github, Gitlab, GitLab CI, Bash, CMake, Kubernetes, Docker.
- Platforms: Linux, Windows.
- Others: Cross language integration (FFI / P/Invoke / COM), analyzing crash dumps, performance profiling etc.

Technical Accomplishments

Peer-to-peer multiplayer games with Rust signalling server

- Developed some multiplayer games - frontend written in TypeScript with React and a 2D renderer (PixiJs).
- Complete support for peer-to-peer via WebRtc - I dealt with the intricacies of WebRTC.
- Created a WebRTC signalling server in Rust, that communicates with the web client via WebSockets.

Coding Austria Hackathon

- Competed amongst 24 teams to build something creative and impactful in 24 hours.
- I lead our team of 5, and we came 3rd place with our idea "Metro-Art", a solution to help visually impaired individuals navigate the Vienna metro.

Open-Source Contributions

- Was a semi-active member in the GStreamer community, profile: <https://gitlab.freedesktop.org/hugosvirak>; involvements include creating merge requests, raising issues, and communicating in the IRC channel.

Web Development Contract at Department of Education - Victoria, Australia

- Still functioning and in use today as of 2026 March (<https://manchesterps.vic.edu.au/>) with only content changes.
- Conference / meetings with school principal to ensure high accessibility, inclusive considerations such as foreign languages, audible features, government compliance, legal considerations and standards are met

Other work (2015 - 2020)

Customer-facing roles across Australia & Canada where I developed strong communication talking directly with customers on a daily basis. This helped to develop and improve my people and soft skills.