

Thomas Eizinger

Passionate software engineer with a strong focus on code and software quality.

I love to share my knowledge through mentoring and talks. Always on a hunt for challenges to improve myself.

Work experience

- 05/2023 – now **Engineer & Client lead**, github.com/firezone/firezone, remote, full-time
- Primary technologies: Rust, WireGuard, ICE, STUN, TURN, DNS
 - Built a UDP-based hole-punching connectivity library for WireGuard
 - Lead the design of `connlib`: Firezone's client-embedded data plane component
 - Built a high-performance, property-based test suite for `connlib`
 - Built a sans-IO TURN server
- 09/2022 – 01/2024 **Contracted open-source maintainer**, github.com/libp2p/rust-libp2p, remote, part-time
- Primary technologies: Rust, libp2p, QUIC, TCP
 - Built QUIC & TCP hole-punching compatibility test-suite between libp2p implementations
 - Mentoring of external contributors
 - Countless Dev-UX improvements
- 02/2021 – 05/2022 **Tech lead**, *CoBloX*, Sydney (Australia), full-time
- Primary technologies: Rust, libp2p, Bitcoin, TypeScript, React
 - Responsible for translating the company's vision into working software
 - Involved in setting the internal team structure including the hiring process
 - T-shaped skill-set around blockchain with expert knowledge on architecture
 - All work is fully open-source on GitHub
- 03/2018 – 02/2021 **Software Engineer**, *CoBloX*, Sydney (Australia), full-time
- Primary technologies: Bitcoin, Ethereum, Monero, Rust, TypeScript, React
 - Responsible for designing and developing the COMIT protocol, a p2p network for non-custodial cryptocurrency trading
 - Coaching colleagues on idiomatic Rust development
- 10/2017 – 02/2018 **Software Engineer**, *Willhaben.at*, Vienna (Austria), full-time
- Primary technologies: Java, Spring Boot, Tomcat, Cybase and Postgres
 - Conceived and introduced WHML: A markup language for consistent, dynamic forms across multiple clients
- 09/2015 – 06/2017 **Software Engineer**, *Senacor Technologies AG*, Vienna (Austria), part-time
- Primary technologies: Java, Gradle, JSF, JPA, EJB, JBoss
 - Development of the sales frontend for a major Austrian bank
- 07/2014 – 06/2015 **Intern**, *IBM Softwaregroup Wien*, Vienna (Austria), part-time
- Primary technologies: Spring Boot, IBM Content Navigator, IBM WebSphere and DB2
 - Configuration and extension of standard software and development of plugins at various client sites
- 01/2014 – 12/2014 **Software Engineer**, *Akademikerhilfe Wien*, Vienna (Austria), part-time
- Primary technologies: PHP, iptables, SNMP and Linux
 - Maintenance of a traffic contingent management software for student dorms

Things I know best

- Languages Rust (full-time since 2018), JavaScript (ES6+), C#, English (IELTS 8/9), Spanish(A2), German (native)
- Concepts Networking (IP, UDP, TCP, DNS, QUIC, ICE, TURN, NAT), FP, REST, TDD, Domain Driven Design, APIs, Modelling, Architecture

Things I like best

Distributed systems, REST (esp. Hypermedia), Open-Source, Cryptography, Design Patterns,DDD, DevOps, Architecture-stuff

Education

- 2015 – 2017 **Master of Science – Software Engineering, UAS Technikum Wien**
Thesis: API-Design in Distributed Systems: A Comparison between GraphQL and REST
Graduated with distinction
- 2012 – 2015 **Bachelor of Science – Computer Science, UAS Technikum Wien**
Thesis: Documentation of RESTful Web Services Built in Java
Graduated with distinction

Side jobs & freelancer projects

- 07/2022 – now **Co-organiser, Rust Sydney Meetup**
- WS 2017 **Lecturer, UAS Technikum Wien**
Lecture: Single Page Applications in JavaScript – 1.5 ECTS
- 02/2015 – 06/2017 **Tutor, UAS Technikum Wien**
C, C++, Java, C#, Design Patterns, Testing
- 11/2014 – 02/2015 **LiveEOG, UAS Technikum Wien**
Prototype for controlling a PC using an Electrooculograph (EOG)
Technologies: C#, WPF

Projects

- since 06/2022 **xtra maintainer**, <https://github.com/Restioson/xtra>
- 09/2021 – 01/2024 **rust-libp2p maintainer**, <https://github.com/libp2p/rust-libp2p>
- 08/2018 – 10/2023 **testcontainers-rs maintainer**, github.com/testcontainers/testcontainers-rs
- since 05/2018 **Curriculum vitae continuous deployment**
As fun exercise and to ease changes to my CV, I version its TeX source files on GitHub and automatically deploy all changes to my website: github.com/thomaseizinger/curriculum-vitae
- since 03/2016 **nobt.io, Open-Source Project** (github.com/nobt-io)
Split your bills with ease
Technologies: ReactJS, Redux, Java, AWS

Talks

- CodeCrafts Vienna 2023 **Have we come full-circle on Web Development?**, Thomas Eizinger
Recording: <https://youtu.be/pbQcVmzeE0E>
- Scaling Bitcoin Tokyo 2018 **The State of Atomic Swaps**, Thomas Eizinger
Recording: <https://youtu.be/FI9cwksTrQs?t=1022>
- VoxxedDays Vienna 2018 **Flux: A modern way of doing MVC?**, David Leitner & Thomas Eizinger
Recording: <https://youtu.be/h9SDuTSy7ps>