

THOMAS MAGES

VIENNA, AUSTRIA - BUT WILLING TO RELOCATE
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WHAT'S NEXT?

Software engineer with several years of industry experience building reliable, high-performance systems. Passionate about Rust, systems programming, and compilers, with an openness to apply my practical experience and theoretical grounding to new complex engineering challenges. Eager to always learn new things.

TECHNICAL SKILLS

Languages: Rust, Typescript, Java, Bash

General: Systems programming, Compilers, Concurrency, Linux, Distributed Systems Containerization, QEMU, Networking

Formal: Logic, semantics, type systems, automated deduction, program analysis

WORK EXPERIENCE

Woven by Toyota 06/2025 - 08/2025
Software Engineer Tokyo, Japan

- Bootstrapped a low-level Rust communication library (inter-process, shared memory communication) to decrease complexities for developers building distributed services inside cars
- Designed an accompanying zero-copy (de)serialization trait and macro system for low latency communication, in close collaboration with multiple other teams
- Shortly worked on internal compiler fork while also developing multiple internal correctness lints to improve safety-critical software reliability
- Shared knowledge and learnings through internal Rust-focused talks, fostering best practices and adoption across teams

Fivesquare 07/2023 - 03/2024
Software Engineer Linz, Austria

- Led design and implementation of a document parsing pipeline and AI-powered document chat used by multiple companies (complex PDFs with tables, using Qdrant, Celery, FastAPI)
- Provided consulting regarding architectural decisions for client SaaS platforms

FireStart 06/2019 - 08/2022
Software Engineer Vienna, Austria

- Part of a founding team building a modern SaaS workflow automation platform from the ground up
- Worked on end-to-end development across four different teams while contributing to architectural decisions building a scalable event-driven microservice architecture for a multi-tenancy system
- Used modern approaches and tools to ensure scalability, reliability and observability
- Technologies used: .NET Core, TypeScript, MongoDB, Azure, Kafka, Sentry, Grafana ...

EDUCATION

TU Vienna - MSc. 01/2025-01/2026
Logic and Artificial Intelligence Vienna, Austria

- Nerd about Logic that went back to school besides work to finally understand Gödel
- Interested in Compilers, Computability theory, Logic, Computer Architecture (Memory Models, ISA, MIA).
- Anticipated graduation in early 2026, with flexibility to adjust studies for compelling opportunities.

TU Vienna - BSc. 10/2023-01/2025
Computer Science Vienna, Austria

- Thesis: Ownership in Rust with a focus on region-based memory management in concurrent contexts. Exploring modern approaches to static interior mutability (Ghost Cell) paired with thread-safe arenas.

LANGUAGES

- German - native
- English - fluent