Gernot F. Ohner

34 Newcastle Road, Boston, MA

☎ 857-384-0304
✉ gernot.ohner@gmail.com
⊕ https://github.com/gernot-ohner

EXPERIENCE

Recurse Center — New York, NY
Participant — *Aug 2021 – Present*

- **cpplox**: Deepened my understanding of C++ and partially implemented a tree-walk interpreter in it, to better understand how higher-level programming languages like Ruby are implemented. Ask me why I switched to Java!
- **jlox**: Tree-walk interpreter for the Lox programming language, using a hand written scanner and recursive descent parsing.
- **pl-util**: Implemented a utility to measure network packet loss using TCP and UDP sockets via Linux syscalls in C.
- **devjobs.sh**: Created a HackerNews "Who's Hiring" job aggregator based on functional Scala using the TypeLevel stack (Cats Effect, fs2, http4s, doobie).

BearingPoint GmbH — Premstätten, Austria
Senior System Analyst — *March 2021 - July 2021*

- **Impact**: Worked for a logistics company to improve a service that transformed (GPS) tracing signals sent by vehicles and into useful information (such as current location and status, expected route, ETA predictions) to facilitate maximally efficient allocation of available trucks and trailers.
- **Architecture**: Built Kafka Streams microservices to transform data based on client requirements. Containerized with Docker, orchestrated with Kubernetes.
- **Availability & Reliability**: Built Spring Boot microservices to make data from Kafka available via HTTP endpoints in a way that was resilient against failure of the Kafka Cluster but also provided real-time updates via websockets

System Analyst — *Dec 2019 - March 2021*

- **Automation**: Increased engineer effectiveness by halving test running time in multiple components and by automating various tasks, such as evaluation of log output with Ruby
- **Integration & Testing**: Implemented end-to-end tests covering Kafka Streams, Kafka Connect, MS SQL Server databases and Spring REST HTTP endpoints using Cucumber.
- **Maintainability**: Reduced method-level technical debt and improved component resilience by refactoring to Java 8/11 features

Institute for Physics, Graz University — Graz, Austria
System Administrator — *April 2018 - April 2019*

- **Automation**: Automated operating system and software installation, thereby reducing human time required by a factor of 10, using Bash. Automated account creation for newly incoming students.
- **Administration**: Created and maintained various services, including but not limited to an internal wiki for process documentation, a printer server (cups), a GitLab server

Research Institute for Internal Combustion Engines and Thermodynamics — Graz, Austria
System Administrator — *January 2013 – September 2016*

- **Assembly**: Assembled and repaired servers used for computational fluid dynamics and personal computers. Selected and purchased the necessary hardware.
- **Management**: Managed servers and computers with Windows Group Policies

PROGRAMMING SKILLS

Languages: Java · Scala · Ruby · C++; Basic proficiency with Python · Typescript · Kotlin · Bash

Technologies: Git · Apache Kafka · Kubernetes · MS SQL Server

Framework & Tools: Spring Boot · IntelliJ · vim · LaTeX

EDUCATION

Graz University of Technology — Graz, Austria
Bachelor of Science in Physics — *Oct 2014 – April 2018*

- **Bachelor Thesis**: Two Dimensional Finite Difference Time Domain Computation of Electromagnetic Fields in Python
- **Select Coursework**: Completed course work from the Computer Science MSc track: Software Paradigms, Compiler Construction, Logic and Computability, Algorithms and Data Structures, Neural Networks, Discrete Stochastics and Information Theory.
- **Languages**: German (native), English (fluent, TOEFL: 113/120)