

JEREMY DAY

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SENIOR SOFTWARE ENGINEER

Software engineering professional with advanced experience in systems programming, compilers, and building highly efficient software. Skills include:

- Extensive experience designing and implementing large systems-level applications in Rust and Scala.
- Deep understanding of compiler implementation and programming language fundamentals.
- Experience with a wide variety of tools, including: source control, continuous integration and build systems, productivity tools (IDEs, cli tools, etc.), and visualization tools (GraphViz, matplotlib)
- Proficient with C/C++, JavaScript, Python, CSS/HTML, and developing in Linux, macOS, and Windows environments.
- Excellent technical communication skills, both in written technical/design documents and orally.
- Advanced knowledge of data structures, algorithms, and efficient program architecture.

EXPERIENCE

Meta Inc., Menlo Park CA

August 2018-April 2023

Senior Software Engineer

Core developer on all layers of a new programming language effort within Meta: language design, compiler implementation, developer tooling, and CI integration. Led development on language parser, C FFI framework, custom register-based virtual machine, AST-based parsing fuzzer, multiple compiler passes, and compiler build system.

- Integrated compiler build into Meta's CI infrastructure, including: continuous (daily) builds, building/testing on PRs, automated code formatting and linting, and building a web-monitoring dashboard to track project health.
- Designed and built a language server and editor integrations (VsCode and Vim,) offering a rich developer experience to our users.
- Orchestrated user studies with internal users to gather feedback on elements of language design, both subjective and objective, and incorporated this feedback into proposals presented at language design meetings.
- Primary contributor on a new custom IDL supporting data interchange and RPC for Meta's next generation AR/VR operating system; including a system runtime to enable a rich programming environment with advanced features such as reactive data-binding and automatic logic remoting. This work was foundational to the development of an App Model in an extremely power/compute constrained environment.
- Authored and presented dozens of technical design documents, which served as the plan-of-record designs for many components of the project.
- Managed 2 interns; codesigned and oversaw their projects: a language server prototype, and a logic serialization framework; provided technical guidance and mentorship.
- Conducted over 100 technical interviews, leading to multiple hires.
- Promoted twice (IC3->IC5, senior) in just 2 years after starting.
- **Primary technologies used include:** Rust, Scala, and Python.

Krumware LLC, Columbia SC

January 2017-July 2018

Software Engineer

Led engineering of a 3 person team developing a web-based dispatch application. Prototyped numerous features, both frontend and backend, on a fast iteration schedule, demonstrated them directly to clients, and rapidly incorporated their feedback into the product.

- Collaborated heavily with product designers, and integrated low-code design tools into the development workflow.
- Full stack development: Polymer frontend; Node.js and MongoDB backend; DevOps integrations with Jenkins, Docker cloud, mLab, and more.

EDUCATION

Master of Science in Computer Science, University of South Carolina

Bachelor of Science in Computer Science and Mathematics (Honors), University of South Carolina

Co-Founder

University of SC Software Engineering Club