

Robert Helmer

Email: rhelmer@rhelmer.org | Web: rhelmer.org | GitHub: github.com/rhelmer

Professional Experience

Senior Staff Software Engineer – Mozilla Corporation (01/2020 – Present)

- **Mozilla Monitor:** Led technical development, launched subscription features, migrated site to Next.js, integrated with experimentation system, and enabled continuous deployment.
- **Mozilla Rally:** Created WebExtension-based research studies, developed Firebase web app, and collaborated with Stanford, Princeton, and The Markup.

Staff Software Engineer – Mozilla Corporation (06/2015 – 01/2020)

- **Experiments Program:** Led Firefox client engineering, integrated privacy-preserving Telemetry (Prio).
- **Firefox Contributions:** Resolved 100+ issues, led "Go Faster" initiative, improved about:addons and about:crashes, enhanced WebExtensions API, and prototyped Rust/React-based add-ons manager.

Senior Web Developer – Mozilla Corporation (09/2010 – 06/2015)

- Led high-volume crash reporting system (Socorro), migrated from PHP to Django, moved infrastructure to AWS, and improved Etherpad open-source project.

VP of Technology – CustomWeather (06/2008 – 09/2010)

- Managed AWS-powered distributed weather mapping, improved Java-based real-time weather services, automated deployments, and built PostgreSQL-based reporting systems.

Open Source Contributions

- **Firefox:** JavaScript, C++, Rust contributions.
- **Etherpad:** Contributor & Software Freedom Conservancy committee member.
- **Mozilla Socorro:** Crash reporting system (Python, Django).

Technical Skills

- **Languages:** Python, JavaScript (Node.js, ES6+), Java, C++, Rust, Bash, SQL.
- **Technologies:** PostgreSQL, MySQL, Django, Flask, Next.js, WebExtensions, Git.
- **Expertise:** Web & browser development, cloud infrastructure, GIS, real-time data processing.