Trevor B. Saunders

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PROFILE

Strong systems developer with 5 years experience. Deep familiarity with open source communities including being a core contributor to Firefox, and a significant contributor to GCC. Careful and thoughtful code reviewer. Accomplished debugger of difficult problems.

EDUCATION

- **Carnegie Mellon University** — *Graduated 2012*
  Computer Science Major with a Math minor

SKILLS

- **Languages**
  - Expert with C/C++, Shell and UNIX tools
  - Proficient with X86/X86_64 assembly
  - Familiar with C#, PHP, Python, Perl, Javascript, Java, Rust, and Standard ML

EXPERIENCE

- **Full Time Software Engineer** — *July 2012 - current*
  Mozilla Corporation
  - Carried out several Firefox wide refactorings to improve performance and readibility
  - Designed and implemented cross process accessibility architecture
    * Implemented a cross process cache of objects
    * Debugged numerous cache invalidation bugs
    * Coordinated with other teams a design and implementation plan that met their requirements
    * Mentored team mates assisting with implementation
    * Helped plan a testsuite to check correctness of new implementation
  - Maintained SpiderNode - a port of Node.js on top of SpiderMonkey (Firefox's JS engine)
    * Worked with JS engine team to expose new features from the JS engine
    * Debugged various API incompatibilities between V8 (Google's JS engine) and SpiderMonkey
  - Improved the Firefox build system's performance and maintainability
    * assisted with several upgrades to our toolchain including compilers for Linux and Android as well as the Android SDK
    * Increased parallelism of the Firefox build system
    * Removed obsolete and unnecessary parts of the Firefox build system
  - Accessibility API maintenance work
    * Made both algorithmic and low level performance improvements to the accessibility API implementation
    * Resolved crashes and assertions found in the field as well as by the internal security team

- **Open source contributions** — *Winter 2009 - Present*
  - GCC contributor since July 2013 focused on improving code maintainability, and enabling other contributors to be effective
  - Helped with C++ conversion work and adding features useful to Mozilla to Binutils and GDB
  - Other projects include AT-SPI2, GTK, Speech Dispatcher, RR, and Orca
  - Github `https://github.com/tbsaunde`
- **Intern / contractor** — *Summer 2011 - spring 2012*
  Mozilla Corporation
  - Worked on accessibility API implementation