Gregory Shuflin

✉ *greg.shuflin@protonmail.com*
☎ 510-332-6344
`https://github.com/gshuflin` (professional)
`https://gitea.everydayimshuflin.com/greg` (personal)

4214 Montgomery St
Oakland, CA, 94611

Qualifications and interests

Motivated, professional computer scientist with broad expertise across several disciplines of industry and open-source software development:

- Programming language, parsing, and typechecking theory, strongly-typed functional programming languages, Scala, Haskell, Elm, Rust.
- Network programming and troubleshooting (OSI model layer 2-4, TCP/IP, IPv6, Ethernet), hardware and software packet processing, embedded Linux hardware bringup, writing clear and maintainable C and C++. Can solder if necessary.
- Full-stack web development, PostgreSQL, Ruby on Rails, Django (Python), modern Javascript (frontend and Node.js) and Javascript tooling (grunt/webpack/npm). I'm a fan of React.js.
- Linux system administration in production cloud environments, Docker containerization, AWS/Terraform experience. I have a running 4U VM server on a shelf in my apartment.

Education

University of California, Berkeley *August 2007 - December 2012*
Bachelor of Arts, Computer Science, Linguistics, Japanese Language
Relevant Coursework: Artificial Intelligence, Compilers, Operating Systems, Algorithms, Data Structures, Computer Graphics

Professional Experience

- **Toolchain Labs** San Francisco, CA
  Software Engineer *June 2019 - present*
  - Primarily responsible for contributing business-critical features/bugfixes to the Pants (`https://github.com/pantsbuild/pants`) open-source build system.
  - Python metaprogramming and gradual typing, performance-critical Rust, collaborating with company-external contributors in a spirit of good open-source citizenship.
- **3D Robotics** Berkeley, CA
  Senior Software Engineer *June 2017 - June 2019*
  - Backend/devops engineer primarily responsible for feature development and cloud provisioning for a Scala web API backend for drone data.
  - Built processes for managing diverse geospatial and photogrammetry data, and computer vision workflows.
  - Relevant buzzwords include: AWS, TensorFlow, OpenCV, Docker, PostgreSQL, Couchbase NoSQL, Terraform, Akka, GDAL, quadrotor drones.
- **Cisco Meraki** San Francisco, CA
  Software Engineer *May 2013 - June 2017*
  - Primarily responsible for feature development and support of several different models of cloud-managed Ethernet switches and WiFi access points.

- Healthy mix of embedded Linux firmware development on networking hardware (C++) and full stack web development (Ruby on Rails/PostgreSQL/React stack + a little Scala).
- Designed and built WiFi statistics monitoring widget with d3 + React, looks cool in demos and saved at least one deal.
- Regular troubleshooting and debugging of hardware and software in production network environments.

- **Waypoint Homes** Oakland, CA
  Software Developer (Summer Internship) *May 2011 - August 2011*
  - Built a custom iPad app to improve the efficiency of real estate inspectors in environments with weak network connectivity, including writing documentation.
  - Rewrote and overhauled Salesforce/Apex-based business logic for real estate pricing calculations.
  - Adapted HTML5/Javascript-based mapping applications to work effectively in mobile device browsers.

Personal Open-source Projects

Untrusted (`alex.nisnevich.io/untrusted`) An open-source browser-based roguelike game where the player must edit the game's code to progress. One of two primary developers. Early version won 1st place in Spring 2013 Berkeley CSUA Hackathon,

Hilite (Rust port)(`https://crates.io/crates/hilite`) Rust port (with a few new features) of Hilite, a simple command-line utility to highlight stderr output, useful for build systems.