

Personal

Owner of curious mind. Lover of political theory and mathematics. Eats and cooks delicious food. Aspiring proof engineer. Father to one chihuahua and one cat. Host of the Orange Combinator Meetup.

Technical Disciplines

Functional Types, Haskell, Coq, Racket, OCaml, Idris, Nix, Guix, Emacs, Rust

Work NixOS CI, Kubernetes services, Haskell/Rust apps, pgp + x509 signing infrastructure, git signing infrastructure, release tooling, linux, PostgreSQL, AWS, GCP

Work History

2021-Now **Software Engineer**, *Arista Networks*, Remote

- Maintained and drove Nix + NixOS CI infrastructure. Used novel techniques to trim closure sizes of on-prem deployments, CI eval and build times.
- Upstreamed many Nixpkgs, Gerrit, Nix, nix-darwin changes as part of distro update cycle.
- Designed and operated release tooling in conjunction with hardware-backed signing infrastructure.

2020-2021 **Software Consultant**, *Consumable*, Remote

- Designed and maintained advertising exchange in Rust.
- Owned and operated exchange and sync nodes for reliability and revenue performance.

2018-2020 **Application Developer**, *Panoramic Software*, Irvine, CA

- Improved software delivery times using agile techniques.
- Delivered brand new claims management product for a large market.

2016-2018 **Software Engineer**, *Verys*, Irvine, CA

- Guided clients to ambitious delivery targets using technical expertise.
- Fostered effective client collaboration with genuine approach to agile development.

Projects

2020-Now **ServerBid**, *Software Consultant*, Advertising exchange

- Designed and implemented and bid caching and circuit breakers in an Actix Web application.
- Used Nix to create reproducible developer and deployment environments.
- Created Yew frontend and Juniper GraphQL api to exchange configuration.

2018-2020 **VetPro**, *Application Developer*, vetpro.us, Elegant, Powerful, Secure VA Benefit claim filing system

- Designed and implemented a single page Elm application for speed, correctness and accessibility.
- Caught runtime errors before they happened with property-based tests.
- Implemented a Docker and Gitlab CI/CD system to increase release frequency.

2018-Now **Guix**, *Contributor*, guix.gnu.org, The GNU Functional package manager

- Added FreeCAD, PureScript and many other packages in email and patch workflow.

Education

2016 **Software Engineering Immersive Program**, *Hack Reactor Remote*

2015 **B.S. Economics, Justice Studies; minors Mathematics, Literature**, *Arizona State University*

Santa Ana, CA

✉ js001@asu.edu • 🌐 refl.club • 🐧 js001 • in js001 • Orange Combinator