

# Paul Schoenfelder *April 12, 1987*

Last update on November 30, 2016

paulschoenfelder@gmail.com • 952-905-4095 • bitwalker.org  
11600 Timberline Road • Minnetonka • Minnesota • 55305

---

## Summary

*I'm an experienced software engineer with a love for open source, languages and distributed computing, and a passion for developing high-quality software.*

I started out in IT as a network engineer, working with Cisco equipment, but it wasn't long before I had delved in to writing scripts for automation. Once I had a taste for code, I knew it was where I belonged, and I was relentless in pursuing an open developer position at the same company. I was given the opportunity, and

I've been a software engineer ever since.

I was thrown in to the world of software engineering, and had to learn fast. I've soaked up books, blogs, talks, whatever I could. I have become proficient in numerous languages, technologies, and practices along the way, and achieved mastery in many of them.

I'm active in open source. I experiment with embedded development. I love functional programming and the challenges of concurrency and distribution. But most of all, I love building software.

---

## Professional Experience

### Exosite

MINNEAPOLIS, MINNESOTA

#### Senior Web and Infrastructure Engineer

*Oct '15 – present*

Lead developer on some of Exosite's most critical core services, built on Erlang and Elixir, with a few in Go (with parts written in C). Became very proficient with an array of AWS services, as well as Kubernetes in order to implement an OpenShift-based hosting platform for customer and internal applications. The applications I built were distributed, highly concurrent infrastructure services, with all the resultant challenges. I am heavily involved in the Erlang/Elixir community, and gave two talks, one at ElixirConf 2015, and one at ElixirConf 2016.

### The Nerdery

BLOOMINGTON, MINNESOTA

#### Senior Software Engineer

*Mar '13 – Oct '15*

Lead developer for a number of projects both large and small, managing teams of 2 to 10 devs. C# and Scala work primarily, but some F# as well. Built a number of open source libraries for the Elixir community, including contributions to the language itself. Focused on growing my functional programming, cryptography, and concurrent/distributed systems skills in my spare time.

### Surge

SAINT PAUL, MINNESOTA

#### Senior Software Engineer

*May '12 – Mar '13*

Lead developer on three projects, leading teams of 2-4 devs, each involving complex web-based applications for large enterprise customers. Developed in-depth expertise with Adobe InDesign Server and InDesign Markup Language. I was a contractor for this period, working 100% remotely.

### ProtoLabs Inc.

MAPLE PLAIN, MINNESOTA

#### Software Engineer

*Oct '10 – May '12*

Primary developer on numerous RD projects. Most developers at ProtoLabs were assigned to one of two teams, web or business apps - I was a bit of an exception, assigned to the business team, but primarily dedicated to research projects which focused on automation, process improvement, and data mining/predictive analytics.

### United States Air Force

MADISON, WISCONSIN

#### Avionic Systems Journeyman

*Apr '09 – Apr '15*

While in the military, I achieved the rank of Senior Airman while working on Lockheed Martin F-16C/D fighter aircraft. I was responsible for maintaining the avionics systems, which involved understanding software, electronics theory, and numerous complicated subsystems of the aircraft.

*You may refer to my [LinkedIn](#) profile for more a more complete list of my work experiences along with recommendations.*

---

## Open Source

### Aria

#### Author/Maintainer

*Nov '16 – present*

Aria is a programming language I'm designing/building. It is a strong, statically typed functional language, modeled after languages in the ML family, but with a focus on ease-of-use, maintainability, and the introduction of modern features that other languages in that family do not have - namely actor-based concurrency, real-time garbage collection, and run-time debugging/tracing tools. It is written in OCaml and C

## Distillery

### Author/Maintainer

May '16 – present

Distillery is a release-management tool for Elixir applications, effectively a redesign/rewrite of ExRM, the original tool I wrote for the same purpose. It is the primary and officially recommended tool for deploying Elixir-based applications. It is a very active OSS project, with many contributors.

## Timex

### Author/Maintainer

Nov '13 – present

Timex is the premier date/time library for Elixir projects. It provides functionality that even most standard library packages in other languages fail to offer. It provides rich parsing/formatting facilities (including locale-awareness), timezone-aware date/time arithmetic, a modular architecture, operations on intervals, and more.

*My GitHub profile contains a list of the many other projects I'm involved in, feel free to take a look!*

---

## Skills

**Languages:** C, C#, Clojure, Elixir, Erlang, F#, Go, Javascript, Lua, OCaml, Python, Ruby, Rust, Scala, Shell

**Theory:** Type theory, compilers, interpreters, data structures and algorithms, distributed consensus

**Dev/Ops:** Networking, administration of Linux and Windows systems, deployment automation, deployment orchestration, continuous integration with internal and external build systems, AWS services, Azure services, Kubernetes, OpenShift

**Development:** I've built applications ranging from simple scripts to desktop applications with graphical interfaces. Single-threaded console utilities, to distributed, heavily-concurrent backend services where performance is critical. I've worked on scripting systems, web applications, some embedded software, and designed and developed remotely upgradeable, hot-pluggable services for gateway devices. If it's something new, I make a point to learn everything I can about the domain, and then dive in.

**Non-technical skills:** Can speak beginner-level Russian, and improving every day

## Interests

**Non-exhaustive and in no particular order:** programming language design and theory, cryptography, artificial intelligence, game development, music, snowboarding, homebrewing, motorcycles, the outdoors, and more! I love to learn, so there is almost always something new I'm picking up.