

## Summary

Full-stack generalist with track record delivering working code on deadline, building high-performing teams around principles of Agile and Functional Programming. Seeking to apply leadership abilities and passion for rigorous design/testing practices to a mission-driven organization that values experimentation, compassion, and social justice.

# WORK EXPERIENCE

## Software Engineer at UpLevel Security

Sep 2016 - Present

Increased early-phase startup's ability to pivot toward new customers by redesigning legacy codebase, delivering demo-able user stories, and teaching clean design principles

Successfully engaged top leadership to re-prioritize code redesign after demonstrating current architecture would fail at minimum loads required by customers

Designed replacement architecture and spearheaded its implementation by encouraging team-wide adoption of strict testing and profiling practices through 1-on-1 coaching and group presentations

Decreased alert-to-mitigation response times through user-friendly UI allowing analysts to construct custom automated mitigation responses from logical building blocks

Enabled custom configuration of on-premises SOC deployments through a suite of golang command-line tools for securely writing credentials to systemd files

#### Senior Software Developer at ThoughtWorks, Inc.

lun 2016 - Sep 2016

Enabled Fortune 500 clients to write better software and increase profits through rigorous application of Agile Methodologies

Delivered user-friendly order fufilment system for multinational logistics company, eliminating need for sales managers to manually fill out order forms for tens of thousands of customers

Drove adoption of application security best practices on two client delivery teams by co-facilitating daylong 'AppSec101' training and follow-up consultations

Increased team cohesion and velocity by leading regular lunch-and-learn sessions on design principles of functional programming and their application in React-Redux apps

#### Creator, Tech Lead at where@

Jun 2015 - May 2016

Designed and shipped prototype for security-conscious location-sharing app

Architected and implemented full-stack mobile app, including Android clients in Java and React Native, web app in React, and server in Scala using websockets and reactive streams to protect users by eliminating stored state on the server

Led team of 8 volunteer developers from ThoughtWorks NYC -- including coaching, pairing, code review, test harness design and coverage enforcement, drafting user stories and acceptance criteria, consensus-building around architectural decisions, coordinating work across 4 parallel dev streams

Received mentorship in threat-modeling, cryptography, and security training from senior Tor/ACLU security technologist Daniel Kahn Gillmore; supervised implementation of Public Key Pinning in Android, privacy-focused alternative to Google LocationProvider in React Native

#### Contract Web Developer at LittleSis.org

Mar 2015 - Jun 2015

Added users and created funding opportunities by adding narrative-driven features to popular graph-based data vizualization platform.

Decreased turnaound time for meeting requests for new features by migrating a 'vertical slice' of app's most popular feature from monolithic PHP/jQuery to modular, testable design in Rails/React

#### Contract Web Developer at BK Shift

Jan 2014 - Jul 2014

Delivered working full-stack Rails app in 3 months, used TDD and Agile best practices to meet evolving business needs over project lifetime.

Helped double weekly revenues by reducing time needed to allocate 300-400 weekly shifts to 100-150 riders by over 50%

Used 1-week Agile sprints to ensure continuous deployment of usable features, front-load completion of learning-rich user stories, provide client with a burn-up chart

## Activist & Researcher at Occupy Wall Street

Sep 2011 - May 2013

Deployed and iterated on complex systems approaches to large-scale social change

Conceived and project-managed Occupy The Boardroom, a web app that sent and displayed personal emails from ordinary people directly to the CEOs of the "Big Six" banks

Coordinated Occupy Sandy's needs assessment canvass in the Far Rockaways, including design and implementation of distributed data-input system to support to overtaxed on-the-ground coordinators

Used NYC's OpenData portal to research property ownership in Crown Heights in support of ongoing affordable housing campaigns; used research to write pamphlets, conduct teach-ins

Coordinated tactical framework development, trainings and communications infrastructure for mass mobilizations of tens of thousands of people in NYC's financial district

#### Online Organizer at Jobs with Justice NYC

Jun 2010 - Dec 2011

Managed online strategy for successful citywide campaign to keep Walmart out of New York City -- growing email list by 38% and generating tens of thousands of YouTube views

#### **Organizer** at Service Employees International Union

Sep 2009 - Mar 2010

Contributed to national campaign to organize Sodexo food service workers through on-the-ground committee building and leadership development

#### **Communications Specialist at Progressive States Network**

Dec 2007 - Sep 2009

Wrote op-eds, blog posts, and press releases to generate multi-state coverage on progressive policy initiatives in health care, immigration, foreclosures, and privatization

## **EDUCATION**

# Recurse Center, Programming Retreat

Nov 2014 - Feb 2015

Wrote non-blocking chat server in Scala, using futures and a custom wrapper around Java's NIO2 library; began work on a Scala BitTorrent client, including custom parser combinators and non-blocking socket IO; completed readings and exercises on algorithms, data structures, function composition, monads, concurrency, and recursion.

## Weekly Private Mentoring, Guillaume Marceau (M.Sci., Brown)

Mar 2014 - Nov 2015

Completed intensive project-driven training including code review and design critique in areas covering algorithms, complexity analysis, domain modeling, designing for extensibility and maintainability, test-driven development, agile project management, functional programming, SOLID object oriented principles, concurrency, distributed programming, etc.

## Harvard University, Performance & Media Studies

Sep 2000 - Jun 2007

Summa Cum Laude Thesis, High Honors in Major, 3.267 GPA

## SKILLS

Languages: JavaScript (es5 - es2017), Scala, Java, Golang, Ruby, SQL, Racket

**Paradigms:** Agile Development, Functional Programming, Full-stack Web Development, Mobile Development, Network Programming, Object-Oriented Programming, Actor-Oriented Programming, Reactive Programming

JVM Libraries: Akka-Streams, Akka-Http, Slick, Play, Gatling, ScalaTest, RxJava, Retrofit, JUnit, Mockito, Robolectric

Javascript Libraries: React, React-Native, Redux, Express, Lodash, Immutable.js, Webpack, Grunt, Mongoose, Mocha, Chai, Sinon

Dev Ops: Continuous Delivery, Automated Testing, Go-CD, Concourse.ci, Docker, AWS, Nginx, DigitalOcean

Security: Threat Modeling, TLS configuration, Server hardening, Public Key Pinning, NaCl crypto library, Signal Protocol