



# Austin Guest

Programmer & Activist

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## SUMMARY

Fast-learning full-stack generalist with track record shipping working code using rigorous design/testing principles. Seeking to apply passion for security and privacy to a mission-driven team that values experimentation, compassion, and social justice.

## WORK EXPERIENCE

### Software Engineer at [UpLevel Security](#)

Sep 2016 – Present

Delivered interactive prototypes to drive customer demos, modularized legacy codebase

- Built UI to automate mitigation responses to threat alerts received from internal indicators and external services (eg: Splunk), adapted it iteratively in response to customer feedback

- Designed and managed incremental, value-driven refactor of monolithic, untested frontend codebase to modular, domain-driven design under full test harness

- Currently: Co-designing transition from REST-driven API layer to subscription-based GraphQL layer

### Senior Software Developer at [ThoughtWorks, Inc.](#)

Jun 2016 – Sep 2016

Harnessed knowledge of application security and Agile to deliver value to Fortune 500 clients

- Facilitated 'AppSec 101' training on basic of web security (SQL injection, XSS, credentials management, etc...)

- Built responsive order management web app for multinational logistics company with tens of thousands of users

- Contributed knowledge of functional programming and React/Redux to weekly bi-weekly team learning sessions

### Creator, Tech Lead at [where@](#)

Jun 2015 – May 2016

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

- Wrote 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

- Currently implementing: continuous delivery pipeline using gcloud/AWS/Docker, Kafka-backed message brokering to enable horizontal scaling

### Contract Web Developer at [LittleSis.org](#)

Mar 2015 – Jun 2015

- Catalyzed migration from monolithic legacy code base to modular, testable design by designing and supervising port of one-feature vertical slice from PHP/jQuery to 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:** Scala, Java, JavaScript/ES6, 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