# BEN "FUZZY" WEISSMANN

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#### SKILLS

- Computer Languages: Extensive experience with Javascript/NodeJS, Typescript, Go, Ruby, Python, Java, HTML, CSS, Bash, SQL. Limited experience with PHP and C++.
- Libraries and Frameworks: React, Redux, jQuery. Meteor, Electron, Ruby on Rails, Sinatra, Django.
- Databases, Tools, and Infrastructure: PostgreSQL, MongoDB, Redis, RabbitMQ. AWS, Kubernetes, Docker, Terraform, Chef, Packer. Webpack, ESLint, Flow. Jenkins, Go.CD, Concourse.
- Operating Systems: Mac OS X. Ubuntu, Debian, and Fedora Linux.

#### EDUCATION

# Massachusetts Institute of Technology

Cambridge, MA

B.S. in Computer Science; Humanities concentration in Writing · Cumulative GPA: 4.6/5.0

June 2014

Selected Coursework: Network and Computer Security, Computer Graphics, Computer Vision, User Interface Design, Computer Systems Security, Design and Analysis of Algorithms, Computation Structures, Linear Algebra, Differential Equations, Multivariate Calculus, Discrete Mathematics

#### Relevant Experience

#### Tulip (https://tulip.co)

Somerville, MA

First Employee, Software Engineer, Architecture Lead

September 2014 - Present

- As first employee, architected, designed, implemented, tested, and deployed a web-based system for creating instrumented, connected apps for the manufacturing shop floor.
- Developed web-based software using NodeJS, React/Redux, Go, MongoDB, Postgres, Redis, and RabbitMQ.
- Created processes for testing, deploying, and monitoring software in use for production-critical manufacturing applications.
- Held broad architectural and implementation responsibilities across front-end and back-end software development, database management, technical operations / DevOps, product design, and interaction with customers' IT.
- As the team grew from 3 to 70+ and raised over \$50M in venture capital, worked on recruiting, mentorship, team organization, roadmap planning, and coordination with business development and customer operations teams.

MIT Media Lab Cambridge, MA

Undergraduate Researcher

June 2009 - August 2014

- Built Lens, a web-based Javascript framework for creating projected augmented reality applications.
- Designed and implemented a Python framework to wrap a C++ gesture recognition library.
- Developed visualization and data mining tools to explore data about the Media Lab's research history.
- Worked on Cartagen (http://cartagen.org), a dynamic mapping framework that use client-side canvas rendering rather than server-side image tile rendering.

## Twitter, Revenue Quality Team

San Francisco, CA

Software Engineering Intern

May 2012 - December 2012

• Architected and implemented Clockwork Raven, an open-source, web-based tool for human-powered data analysis using Mechanical Turk. Used by multiple teams at Twitter to gather tens of thousands of judgments weekly. Code: https://github.com/twitter-archive/clockworkraven/

# TripAdvisor, Commerce Team

Newton, MA

Software Engineering Intern

December 2010 - August 2011

- Updated forecasting system to create a real-time calendar to summarize advertising budgets using Ruby on Rails.
- Prototyped a distributed system to predict how changes in advertising configuration would impact clickthrough and sales, running on a small cluster of machines using the Hadoop Map/Reduce framework.

### Publications and Projects

# Typing the Untyped Soundness in Gradual Type Systems

Strange Loop

September 2019

- A conference talk about soundness and completeness in gradual type systems, including topics in covariance/contravariance, flow-sensitive typing, and gradual type system design.
- Video: https://www.youtube.com/watch?v=uJHD2xyv7xo. Slides: https://bit.ly/sl-types

#### 50 Bills 50 States

Remote

 $Website\ Lead$ 

December 2016 - October 2017

- Designed, built, and deployed a website for 50 Bills 50 States, a campaign led by Sam Brinton to introduce legislation banning conversion therapy in all 50 states. Created tooling to update the website based on a spreadsheet the legislative team could update, and also managed email systems for the campaign domain.
- Handed off the website to The Trevor Project web team after the campaign joined The Trevor Project. Archive of original website: https://50bills50states.benweissmann.com/