

## Senior Software Engineer at Simon Data

NYC / Remote, Sept '17 - Oct '18

I was an early hire (employee ~20). I rebuilt one of the core products (customer segmentation) from scratch as an SPA, worked on the internal DSL for customer segmentation, pushed for reusable, isolated environments with Docker Compose/AWS ECS, implemented customer subdomains, improved the deploy process to allow parallel deploys of different environments, served on-call shifts, and worked in-depth on the campaigns (Flows) product.

**Tech:** Python 2/3, Django, Postgres/Redshift + MySQL/RDS, AWS, Docker, Elasticsearch, RabbitMQ, Jenkins, React, Redux, Webpack, Memcached, Tox, Pytest, NetworkX

## Cofounder at DoubleBlinded

NYC, Jan '16 - Sept '17

I cofounded a company with two Ph.Ds (neuroscientist from Columbia + biologist/data scientist from San Diego State) and another software engineer to research the feasibility of doing single participant (n-of-1) clinical trials as a way to make trials for generic drugs and non-patentable medical practices more economically feasible and to improve postmarketing surveillance. Unfortunately we ultimately concluded that our business model was not feasible largely due to regulatory concerns and moved on.

**Tech:** Python, Pandas, R, Numpy, Matplotlib, React, Redux, RabbitMQ, Redis, Docker/Compose, Semantic UI

## Lead Frontend Engineer at Teachable

NYC, June '14 - Jan '16

As the **first hire**, I built the core product's frontend which is now used by thousands of schools and generates millions in revenue. I added functionality to the Rails backend as needed, implemented ElasticSearch, set up the frontend build system with Gulp, set up an automated end-to-end testing system with CI, and interviewed engineering candidates. This started out as a contract role and then became full-time. I left to start DoubleBlinded.

**Tech:** Javascript, Angular, Node, Gulp, Protractor, ElasticSearch, Docker, Ruby, Rails, Stripe Payments, Postgres, AWS

## Engineering Consultant / Interim CTO

Global, Aug '11 - June '14

I did a combination of consulting and contract engineering for upcoming companies. In each case, I traveled to wherever the company was based. I lead a team as interim CTO for an agriculture startup in Vancouver, BC, lead the development of Walk [Your City] remotely, and build a realtime messaging tool for a client in Berlin.

**Tech:** Javascript, Node, Postgres, Sequelize, Titan Graph Database, AWS, Redis, Python, Stripe Payments, Redis

## Web Application Developer at NC State University

Raleigh, Sept '09 - Aug '11

I built open-source web applications for the Office of Information Technology using PHP and Zend Framework.

## Misc

### Recurse Center

Winter II 2016

I wrote an open source command line tool in Node that analyzes a user's emotion and sentiment over their lifetime by using an API to detect emotion in photos of them taken every 5 minutes. I wrote an analysis of my own dataset using Pandas in an open source Jupyter Notebook.

[github.com/cjroth/chronist](https://github.com/cjroth/chronist)

### New York Code + Design Academy

Summer 2016

I taught part of the Intro to Web Development course to a class of 15 students and helped develop the course curriculum from scratch.

## Values

Humbleness

Curiosity

Commitment

Kindness

Empathy