MATTHEW KAUFER

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EDUCATION

Georgia Institute of Technology (Georgia Tech), Atlanta, GA   August 2016 – May 2019
B.S. in Computer Science (AI & Devices), GPA: 3.94 / 4.00

SKILLS

Programming Languages: TypeScript / JavaScript, Python, Ruby, HTML, CSS/SASS
Frameworks & Libraries: React, Node.JS, AWS, MongoDB, Rails, SQL, three.js

WORK

Full-Stack Software Engineer at SignalFire   April 2023 – Present
San Francisco, CA
- Automated talent sharing workflow to allocate talent between portfolio companies.
- Rewrote legacy pages and chrome extensions for managing company search and people search. Modernized ~10 year old codebase to TypeScript, React, and Sorbet (Ruby type system).
- Built auto-deploy system for PRs to create culture of rapid feedback and iteration.

Full-Stack Software Engineer at Scale   July 2019 – March 2023
San Francisco, CA
- Designed and built several ML human-in-the-loop systems to drastically reduce time to label 3D LiDAR tasks. Led creation of Scale's first A/B framework to track feature impact across projects. Collaborated across ML and operations to deploy HITL systems to all 3D customers.
- Led product creation & pilot delivery on novel labeling projects (3D mesh segmentation)
- Engineered suite of tooling to generate and manage quality signal for tens of thousands of global data labelers. Leveraged these signals to increase margins on multi-million dollar contracts
- Created dynamic templating engine for internal tooling, saving engineers significant overhead and reducing inconsistencies & bugs in codebase

EC2 Security Infrastructure Intern at Amazon   May 2018 – August 2018
Seattle, WA
- Designed, built, and tested software to handle data from and validate health of millions of EC2 instances
- Wrote code to be deployed in 16 AWS regions across the globe

Research Assistant at Robotic Musicianship Research Lab   August 2017 – December 2018
Georgia Tech, Atlanta, GA
- Trained machine learning models for signal processing of ultrasound data. Utilized said models to interface with prosthetic arm to enable playing of drums & piano
- Designed system for musical improvisation with genetic algorithms, connected to marimba playing robot
- Built NLP and audio synthesis systems for robotic companion

HackGT Organizer   November 2016 – May 2019
Georgia Tech, Atlanta, GA
- Create and maintain technologies such as HackGT's registration app, check-in app, and event websites, handling data from over 6,000 applicants
- Lead workshops to teach students about technologies such as web and android development
- Build interactive NFC platforms to keep hackers engaged and connected with one another

PROJECTS

Spo-tfidf-y
- Created semantic vectors of an artist's discography from scraped user playlists
- Performed analysis on vectorized output to analyze user listening trends
- Wrote up results and created interactive d3 graphs in a blog post

Fetch Path Planning
- Developed variant of BiRRT path planning algorithm for robotic mobile manipulator
- Wrote custom code for 3D inverse kinematics, simulation, and path planning from scratch in Python