

## Mission Statement

Machine learning as a field is still in its infancy, but the techniques and best practices that make ML models productive at scale are starting to emerge.  
Making AI helpful to people is the entirety of my professional focus.

## Technologies

- Python, Typescript, Java, SQL
- Tensorflow, Keras, PySpark
- Kubernetes, Docker, Terraform, Pulumi
- AWS, GCP, Linux, Bash, Git

## Experience

### CrowdAI - Software Engineering Manager (September 2020 - July 2022)

*Python, Kubernetes, Terraform, AWS (+ GovCloud), Tensorflow, Keras, GIS, Celery*

- I managed a team of 6 backend-and-infrastructure engineers to build and maintain the CrowdAI's machine learning platform.
- Built the automated training and inference mechanisms, ETL image-processing pipelines, and multi-cluster deployment infrastructure.
- Worked closely with data scientists to train, evaluate, debug, and deliver vision models.
- I was personally responsible for design and implementation of key subsystems, especially those involving distributed-systems problems.

### Omniscience - Software Engineer (August 2018 - August 2019)

*Python, Jupyter, Spark, SKLearn, Tensorflow, AWS (EC2, VPC, EMR, S3, RDS, Dynamo)*

- Automated the infrastructure supporting a team of data scientists leading to a 10x increase in experiments run
- Led the design and implementation of software to serve machine learning models to clients
- Designed analyses of client data, and delivered statistics and visualization reports on said analyses

### Boston University VLSI Lab - Lab Assistant (September - December 2017)

*Cadence Virtuoso*

- I worked under professor Allyn Hubbard, assisting the students in his EC571 Digital VLSI class with computer-aided design of digital circuits.

## Recent Projects

### Homelab

I run multiple self-hosted kubernetes clusters on-metal, one equipped with a GPU inference node, managed by Pulumi or Terraform. (To-do: multi-gpu)

- *Pulumi, Terraform, Kubernetes*

### Citrine

Citrine is a tool designed to deliver machine learning inference to nontechnical users.

- *Python, Onnx, Pytorch, Qt*

### Code in Place

I participated as a section leader in Code in Place. Code in Place was a Stanford initiative to teach python programming during the coronavirus lockdown while people were encouraged to stay home.

- *Python, Zoom, Karel, PIL*

## Education

### Boston University College of Engineering (2014 - 2018)

Bachelor of Science in Electrical Engineering and in Computer Engineering