

## EDUCATION

### Stanford University

Stanford, CA

M.S. Computer Science

(Concentration: AI)

GPA: 4.04 / 4.00

2020 – 2022

### Purdue University

West Lafayette, IN

B.S. Computer Engineering

2016 – 2020

GPA: 4.00 / 4.00

Highest Distinction

## SKILLS

### Programming Languages:

- Python
- C / C++
- Ruby
- Scala

### Technologies / Frameworks:

- Transformers / LLMs
- PyTorch / TorchVision
- TensorFlow / Keras
- XGBoost / Scikit-Learn
- PyG / NetworkX
- SHAP / LIME / XAI
- SQL / Trino / Presto
- Spark / Hadoop
- Flyte / WandB
- Airflow / Kafka / Flink
- Docker / Kubernetes
- AWS / Azure / GCP

## TEACHING ASSISTANT

- CS 221: AI (Spring '22)
- CS 142: Web Dev. (Winter '22)
- CS 230: [Head TA] DL (Fall '21)
- CS 107: Computer Organization & Systems (Spring '21)

## RELEVANT COURSES

- CS 329T: Trustworthy ML
- CS 329S: ML System Design
- CS 231N: Computer Vision
- CS 231A: 3-D Computer Vision
- CS 224W: Graph ML
- CS 224N: NLP
- CS 230: Deep Learning
- CS 229: Machine Learning
- CS 221: Artificial Intelligence

## ORGANIZATIONS

- Stanford TreeHacks

## LINKS

- [Google Scholar](#)
- [GitHub](#)

## INDUSTRY EXPERIENCE

### Stripe

Machine Learning Engineer

Apr 2024 – Present

San Francisco, CA

- Accelerating the adoption of LLM technology at Stripe as an MLE on the Applied ML Accelerator team
- Building a foundation model leveraging Stripe's unique perspective into the world's financial ecosystem
- Tech stack: LLMs, RAG, fine-tuning, benchmarking, LLM evals, prompt engineering, assistants

### Stripe

Machine Learning Engineer

Jul 2022 – Mar 2024

San Francisco, CA

- Built ML models to balance Stripe's losses and UX as an MLE on the Fraud Discovery team
- Led a team of engineers, strategists, data scientists, and ops specialists to propose and build Scorpion - Stripe's first multivariate time-series transformer for Risk Detection, saving \$16M+ / year in losses
- Tech stack: SQL, Presto, PySpark, Airflow, Kafka, Flink, Flyte, Databricks, PyTorch, TensorFlow

### Google

Software Engineering Intern

Sep 2019 – Dec 2019

Seattle, WA

- Built ML explainability for models on Google Cloud as a SWE on the Google Cloud AI team
- Added Model Distillation capabilities to convert black-box ML models deployed on Google Cloud into interpretable tree-based models (Soft Decision Trees, Random Forests, Gradient Boosted Decision Trees)
- Tech stack: TensorFlow, Keras, scikit-learn, Fig, Blaze

### Qualcomm

Machine Learning Intern

May 2019 – Aug 2019

San Diego, CA

- Built ML models for power-efficient Qualcomm chips as an MLE on the ML application analysis team
- Proposed and built a time-series LSTM model to estimate QoS parameters that trade-off performance and power depending on the Snapdragon chip's use-cases (AR/VR, Gaming, Multimedia, etc.)
- Tech stack: PyTorch, scikit-learn, Git

## PROJECTS

### Scorpion: Multivariate time-series transformer for Risk Detection

Jun 2024

- Led a team of engineers, strategists, data scientists, and ops specialists to propose and build Scorpion - Stripe's first multivariate time-series transformer for Risk Detection, saving \$16M+ / year in losses

### FI-Explain: ML explainability tool for fraud insights

Mar 2024

- Proposed and built FI-Explain - a scalable ML explainability tool powering Stripe Sonar that probes Stripe's black-box ML models to gain insights into fraudulent signals exploited by bad actors

## RESEARCH EXPERIENCE

### Stanford University

Graduate Researcher

Sep 2020 – Jan 2021

Stanford, CA

- Intuitive human-robot interaction using Reinforcement Learning at the Stanford Vision and Learning Lab

### Purdue University

Research Assistant

May 2018 – May 2020

West Lafayette, IN

- ML for Signal Processing (modulation classification and interference identification) at Aly El Gamal's lab

## ACADEMIC PUBLICATIONS

- **[J3]** Ramjee S., Ju S., Yang D., Liu X., El Gamal A., Eldar Y.C., "Ensemble Wrapper Subsampling for Deep Modulation Classification". IEEE Transactions on Cognitive Communications and Networking, Aug. 2021 [\[LINK\]](#)
- **[J2]** Wang X., Ju S., Zhang X., Ramjee S., El Gamal A., "Efficient Training of Deep Classifiers for Wireless Source Identification using Test SNR Estimates". IEEE Wireless Communication Letters, Apr. 2020 [\[LINK\]](#)
- **[C1]** Zhang X., Seyfi T., Ju S., Ramjee S., El Gamal A., Eldar Y.C., "Deep Learning for Interference Identification: Band, Training SNR, and Sample Selection". IEEE Signal Processing Advances in Wireless Communications, Jul. 2019 [\[LINK\]](#)
- **[J1]** Ramjee S., Ju S., Yang D., Liu X., El Gamal A., Eldar Y.C., "Fast Deep Learning for Automatic Modulation Classification". IEEE Machine Learning for Communications Emerging Technologies Initiatives, Jan. 2019 [\[LINK\]](#)

## HONORS AND AWARDS

- AI Fellowship | Bain Capital Ventures | Jun 2024
- Best Product Opportunity Assessment (POA) Award | Stanford University | Nov 2021