

Experience

Machine Learning Engineer **Stripe** *Mar 2024 - Present*
Advanced Attacks New York, NY

- Building ML model to detect card testing attacks, protecting merchants from fraudulent transactions.
- Built a rule recognition system to identify suspicious transaction patterns that indicate card testing attempts.

Machine Learning Engineer **Nextdoor** *May 2023 - Nov 2023*
Vitality ML New York, NY

- Led the development and deployment of an ML model to evaluate posts and comments for community guideline violations. This model served as a critical metric for monitoring violative content on the platform.
- Proactively addressed data quality challenges; proposed and executed plan to use GPT to enrich the training dataset, delivering a 12% boost to our detection rate.

Machine Learning Engineer **Twitter** *Aug 2021 - Feb 2023*
Trust & Safety - Abusive Interactions New York, NY

- Transformed our abuse detection model into a multimodal one, resulting in a 10% increase in model precision.
- Tested and analyzed modeling methods, increasing remediation of violative content by 15% and expanding detection to 2 new languages.
- Refreshed and migrated our tweet report ranking model, leading to a 63% increase in report action rate and a decrease in model training time of 90%.

Research Assistant **University of Michigan Radiology** *Jun 2020 - Dec 2020*
Deep Learning for MRI Reconstruction Ann Arbor, MI

- Developed novel neural network architecture for brain MRI upscaling that outperformed baseline methods with 50% fewer parameters, enabling faster patient scanning with minimal image quality loss.
- First author on '[Adapting the U-net for Multi-coil MRI Reconstruction](#)' and co-author on '[A Custom Loss Function for Deep Learning-Based Brain MRI Reconstruction](#)', both published at the International Society for Magnetic Resonance in Medicine (ISMRM) 2021.

Teaching Assistant **University of Michigan CS** *Jan 2018 - Apr 2021*
PL Theory, OOP in C++ Ann Arbor, MI

- Developed instructional materials for 1000+ students per semester. Hosted exam review sessions, taught discussion sections, delivered lectures, and assisted students in office hours.

Skills

- Languages: Python, SQL, Scala, C++
- Technologies: Deep Learning Frameworks (TensorFlow/Keras, PyTorch), Stream and Batch Processing Systems (Spark, Beam), Query Engines (BigQuery, Databricks), ML Orchestration (Flyte, Kubeflow, Airflow)

Internships

- **Twitter**, Implemented neuroevolution program to optimize Method Inlining in GraalVM's Java compiler. [Presented](#) at CGO 2020's Graal Workshop. *Summer 2019*
- **Amazon Music**, Designed and implemented AWS architecture for marketing campaigns to send notifications into the web app. *Summer 2018*

Education

- **M.S. Computer Science**, University of Michigan. GPA: 3.64 *2021*
- **B.S.E. Computer Science**, University of Michigan. GPA: 3.91 (Summa Cum Laude) *2020*