Haekyu Park

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Education

Georgia Institute of Technology
Ph.D., Computer Science
Advisor: Dr. Polo Chau
Aug 2018 - Dec 2023

Seoul National University
B.S., Computer Science and Engineering
Graduated with honors (Cum Laude)
Mar 2012 - Aug 2017

Work Experience

Stripe, Remote
- Machine Learning Engineer
- Nov 2023 - Jan 2025
- Developed and enhanced ML models for detecting fraud transactions.
    - Investigated and resolved degraded performance in a fraud detection model by redesigning an unrealistic labeling strategy, improving prediction performance.
    - Fine-tuned a fraud dispute prediction model and optimized performance for specific target regions.
- Streamlined the training data generation processes on Stripe's ML pipeline, accelerating experimentation across Stripe's ML ecosystem.

Stripe, Seattle, WA
- Machine Learning Engineering Intern
- May 2022 - Aug 2022
- Mentor: Revanth Rameshkumar
- Designed and implemented a deep neural network for detecting fraud transactions, highlighted in this blog. The model's advanced design reduced the time to train our model by over 85% (to less than two hours), significantly increasing the volume of fraud transactions detected.

Microsoft Research, Redmond, WA
- Research Intern
- Jun 2021 - Aug 2021
- Mentor: Gonzalo Ramos
- Developed an interactive system enhancing users' ability to re-find previously encountered online information.

NVIDIA, Santa Clara, CA
- AI Infrastructure Software Intern
- May 2020 - July 2020
- Mentor: Joe Eaton, Brad Rees, Bartley Richardson

- Developed a visual graph analytics tool, designed for interactive and real-time analysis of large graphs, by leveraging the power of GPU acceleration.

NVIDIA, Austin, TX

- Data Science Intern
- May 2019 - Aug 2019
- Mentor: Bartley Richardson, Brad Rees, Joe Eaton
- Developed and demonstrated an approach to flagging anomalous cyber-network communications in a large graph, by using a combination of structural graph features and advanced graph analytics. The end-to-end solution was implemented using NVIDIA RAPIDS, and this project was presented at KDD'19 NVIDIA RAPIDS tutorial.

Honors and Awards

Rising Stars in EECS, 2022
Rising Stars in EECS, Hosted at the University of Texas at Austin

J.P.Morgan PhD Fellowship, 2021
J.P.Morgan PhD Fellowship for my PhD work "Human-centered AI: Interactive Scalable Interfaces for Trustworthy and Safe AI"

"Thank a Teacher" Award, 2019
Center of Teaching & Learning (CTL), Georgia Institute of Technology

Moon-Jung Chung Scholarship, 2019
KOCSEA (The Korean Computer Scientists and Engineers Association in America)

National Scholarship for Science and Engineering, 2019
National Scholarship for Science and Engineering

Skills

Programming Languages

- Python, SQL, Java, Scala

ML Frameworks

- TensorFlow, PyTorch, scikit-learn, etc

MLOps and Infrastructure

- Airflow, AWS, Docker, Weights & Biases, Prometheus

Scalable Data Processing

- Apache Spark