

Suro Lee

New York, NY | Canadian citizen | 929-575-1938 | sl5203@columbia.edu
suro119.github.io | linkedin.com/in/suro-lee | github.com/suro119

EDUCATION

Columbia University

Master of Science – Computer Science, Machine Learning Track

- GPA: 4.08

Dec 2023 (expected)

New York, US

Korea Advanced Institute of Science and Technology (KAIST)

Bachelor of Science – Computer Science, Specialization in Artificial Intelligence

Minor in Electrical Engineering

Feb 2022

Daejeon, Korea

RELEVANT COURSEWORK

Math: Real Analysis, Linear Algebra, Probability and Statistics, Differential Equations

Machine Learning: Computational Learning Theory, Statistical Learning Theory, Machine Learning, Artificial Intelligence, Computer Vision, AI Based Software Engineering, Natural Language Processing

EXPERIENCE

Columbia University

Teaching Assistant, Computing for Business Research

Sept 2022 – Dec 2022

New York, US

- Supported 70+ graduate students in Python, MATLAB, C, Bash, R, MySQL, TensorFlow, and Git by holding weekly office hours
- Code-reviewed and provided feedback for biweekly programming assignments

Samsung Research

Software Engineer, Visual Perception Team

Jan 2022 – Jul 2022

Seoul, Korea

- AI Recipe Navigation: Integrated newest research from various Samsung AI centers into an interactive AI recipe navigation web demo using Node.js, Flask, Svelte, Bootstrap, and Mosquitto
- AI Cooktop: Developed an ingredient detection demo that uses a projector to display detection results on a kitchen table and suggest appropriate recipes based on the ingredients
- Both demos featured at Samsung Research Open Lab 2022

KAIST INA Lab

Undergraduate Researcher

Feb 2021 – Sep 2021

Daejeon, Korea

Project: Content-Aware and Task-Aware Variable Rate Image Compression using Compressive Autoencoders

- Exploited content-specific redundancies by training a compressive autoencoder with a dataset consisting of only one type of content such as faces (i.e., CelebA Dataset), achieving up to 2% improvement in terms of PSNR
- Optimized the compressive autoencoder for a task-specific loss instead of a perceptual loss, which outperformed JPEG in image classification up to 11% in terms of accuracy for low resolution images

Koh Young Technology

Research Intern, Machine Intelligence Team

Mar 2019 – Aug 2019

Yongin, Korea

- Implemented a prototype for a distributed, real-time SMT (surface-mount technology) inspection process using Apache Kafka, Apache Spark, and Apache HBase—which was later developed into a successful full-fledged product
- Achieved up to 10x speed up from batch processing, significantly decreasing the number of defects in the solder paste printing process

EXTRACURRICULAR ACTIVITIES

2022 ICPC Columbia University Local Contest

Sep 2022

- 15th out of 112 participants; solo contest

TECHNICAL SKILLS

Languages: Python, C++, C

Machine Learning: PyTorch, TensorFlow

Web Development: HTML, CSS, Svelte, Flask, Bootstrap, Node.js

Mobile Development: Android Studio, Flutter, Unity

Distributed Systems: Apache Kafka, Apache Spark, Apache HBase

Developer Tools: Docker, GitHub