Neil Yeung

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Education

University of Rochester — Rochester, NY

B.S. Computer Science, B.A. Math & Stats, GPA: 3.6 — *Aug. 2019 – May 2023 (expected)*

Experience

Machine Learning Software Engineering Intern — May 2021 - Present

Intel Corporation, Machine Learning Performance Group — *Santa Clara, CA*

- Trained Vision Transformers for interactive and non-interactive segmentation on the Medical Segmentation Decathlon (MSD) dataset in **Python** and **PyTorch**. Enabled distributed training on CPU clusters using Intel® Extension for PyTorch (IPEX) for the MONAI framework.

Software Engineering Intern — June 2020 – Oct 2020

Intel Corporation, Graphics Performance Group — *Folsom, CA*

- Built automated reporting system for graphics simulator performance stats in **Python** and implemented reporting of two new key stats in **Go** for graphics simulator. Replaced the group's previous method of sharing stats data through local, un-versioned Excel sheets and increased group-wide data transparency and meeting productivity.

Research Assistant — Jan 2020 – Present

University of Rochester, VIStA Group — *Rochester, NY*

- Conducted sentiment analysis research of Twitter chatter data about COVID-19 mask wearing in **Python** and **PyTorch**. Research resulted in a first-author paper accepted to 2020 IEEE Big Data (accept rate: 17%) and an interview on the popular data science podcast, Data Skeptic.
- Trained generative video prediction model for bone lesion prediction on mouse MRI dataset in **Python**.

Software Engineering Intern — Summer 2016 | Summer 2017

CIeNet Corporation, In-Vehicle Infotainment System Group — *Santa Clara, CA | Beijing, China*

- Developed white noise generation program for augmenting in-vehicle speech recognition engine. The program increased voice recognition accuracy on edge cases by 20%.
- Developed Android Auto music player app in **Java** for an automotive infotainment system. App was used as a base for the final music player and shipped to client, a major American automotive company.

Skills and Selected Coursework

Programming Languages: Java, Python, Javascript, Go, C/C++, SQL, Bash

Tools, Frameworks, and Libraries: Git, Linux, Docker, LaTeX, PyTorch, React.js, Node.js, Flask, Linux

Languages: Fluent in English and Mandarin Chinese

Coursework: CSC 282: Advanced Algorithms, CSC 240: Data Mining, CSC 246: Machine Vision, MATH 173: Honors Linear Algebra

Projects

Bone Lesion Prediction: A project in **PyTorch** that demonstrates that deep generative models can be used to predict bone lesions by generating future Bone CT scans. Manuscript on results to be submitted to *BME Frontiers*.

Get Fit!: An Android app in **Java** to track runs and calculate calories burnt using the Google Maps API.

Talks, Awards, and Publications

Talks: Data Skeptic podcast (30k+ weekly listeners) interview about COVID-19 face mask sentiment analysis research paper.

Awards: Rush Rhees Scholarship (half tuition), National Merit Semifinalist

Competitive Programming: Passed North American Qualifiers (NAQ) for ICPC 2021 & placed 29th in ICPC Northeast Regionals

Publications: **Neil Yeung**, Jonathan Lai, and Jiebo Luo, "Face Off: Polarized Public Opinions on Personal Face Mask Usage during the COVID-19 Pandemic," IEEE International Conference on Big Data, Atlanta, GA, December 2020.