

Edward C. Yao

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EDUCATION

Dartmouth College

Majors: Computer Science, Economics

Minor: Mathematics

September 2015 - June 2019

Overall GPA: 3.83/4.00

EXPERIENCE

Facebook | Instagram

Backend Engineering Intern

June 2018 - August 2018

Menlo Park, CA

- Implemented backend support in **python (Django)** and **PHP/Hack** for several Instagram notification types designed to help business users respond to their direct messages more effectively (specific details currently under NDA)
- Improved latency for several critical endpoints that served Instagram Direct messages, reducing overall inbox load times by 12% on average.

Johns Hopkins University Applied Physics Laboratory

Cybersecurity Research Engineering Intern

January 2018 - March 2018

Laurel, MD

- Carried out data analysis on compilation statistics of hundreds of GitHub repositories written in **C**, **C++**, and **Java**, and trained several deep neural network models to classify types of compilation errors based on Clang tokenization of relevant erroneous lines of code
- Architected and trained machine learning models in **PyTorch** and **scikit-learn** to explore possibilities of determining malicious/hacked application states given snapshots of IoT device RAM

Dartmouth Hitchcock Medical Center

Research Assistant

June 2017 - August 2017

Hanover, NH

- Researched predictive capabilities of deep convolutional neural network models trained on sample cell slide images
- Fine-tuned various convolutional networks in **python (PyTorch)** such as ResNet and VGG on high-resolution images (larger than 15 megapixels)

Educatrium

Web Development Intern

June 2016 - August 2016

Seoul, South Korea

- Developed a web application from scratch using **AngularJS** and **Ruby on Rails** that lets students in Asia applying to American universities create profiles, upload information, and search for mentors, automating a previously completely human-managed process
- Created the frontend views in **AngularJS** and **Bootstrap**, and interfaced with other team members to sync logical REST API calls

TEACHING ASSISTANTSHIPS

COSC 1 - Introduction to Programming and Computation

COSC 10 - Problem Solving via Object-Oriented Programming

COSC 74 - Machine Learning and Statistical Data Analysis

LANGUAGES AND TOOLS

Proficient

Python, C, JavaScript, LaTeX

Experienced

Java, MATLAB, Mercurial, Git

Familiar

VHDL, Assembly, Clojurescript, Ruby on Rails, C++, PHP/Hack