Raymond Y. Xu

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Education

Cornell University, College of Engineering, Ithaca, NY
Master of Engineering in Electrical and Computer Engineering   2018
Bachelor of Science in Electrical and Computer Engineering   2017

Experience

Machine Learning Software Engineer   October 2020 - Present
Google — Kirkland, WA / Remote

• Document AI team, developing NLP machine learning algorithms for analyzing text on forms and other documents.

Volunteer Program Manager   October 2020 - Present
Humanity Forward — Remote

• Acting Humanity program manager, coordinating voluntters to call voters for political candidates.

Founder   April 2020 - October 2020
Denread — Remote

• Built chrome extension, Denread, allows users to click a website paragraph to drop down similar web text.
• Useful for sourcing news, finding research articles, web research.
• Managed one summer intern. Conducted codebase walkthroughs, algorithm discussions.
• Universal sentence encoder & approximate nearest neighbor search for NLP feature comparison.
• Pure JS frontend, django and simple tensorflow serving backend, hosted on Google Cloud Platform (GCP).

Machine Learning Perception Engineer   July 2018 - May 2020
Johns Hopkins Applied Physics Lab — Laurel, MD

• Worked on small teams on Navy research contracts related to imaging software and visual based navigation.
• Led an internal research project to capture underwater images and extract depth information.
• Created a orientation prediction network, predicting which way boats were facing based on images of them.
• Designing and improving web and offline auto-annotation tools for detection, segmentation, and orientation.
• Built detection systems for boats in long range infrared imagery in C++, training models in tensorflow.

Master of Engineering Design Project: Machine Learning   August 2017 - May 2018
Sabuncu Lab — Cornell University

• Sabuncu Lab worked to improve the speed of MRI acquisition.
• Helped by achieving image registration of 3D brain MRIs using feature comparison in a siamese neural network.

Skills

Machine Learning, Python, Tensorflow, Convolutional Neural Networks, Natural Language Processing, C++, Javascript, Django, Bash, Linux, GCP

Personal Interests

Political Activism: Tech for Campaigns, calls, door knocking during election cycles   July 2018 - Present

Classical Guitar: Performed at Cornell's 13$^{\text{th}}$ President inauguration faculty reception, Cornell Perkins Prize

Other: Radio show hosting, Recreational intramural sports