

Raymond Y. Xu

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Skills

Machine Learning, Python, Tensorflow, CNNs, NLP, C++, Bash, Linux

Technical Experience

Machine Learning Software Engineer

October 2020 - Present

Google — Kirkland, WA / Remote

- On the Document AI product team
- Developing NLP machine learning algorithms for analyzing text on forms and other documents.
- Pretrained BiLSTMs on big data for improved performance using spatial features on invoices.
- Improved machine learning training pipelines in Google's proprietary language (borg).

Founder

April 2020 - October 2020

Denread — Remote at Antler Incubator

- Built chrome extension, Denread, allows users to click a website paragraph to drop down similar web text.
- 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.

Other Experience

Volunteer Program Manager

October 2020 - Present

Humanity Forward — Part Time, Remote

- Coordinating calls voters for political candidates and calls to small businesses for petitions.

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

Personal Interests

Political Activism: Calls, door knocking during election cycles

July 2018 - Present

Classical Guitar: Performed at Cornell's 13th president inauguration faculty reception, Cornell Perkins Prize

Other: [Youtube Channel](#), Radio show hosting, intramural sports