

# Raymond Y. Xu

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## Education

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### **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

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### **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 volunteer 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

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

## Personal Interests

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

**Classical Guitar:** Performed at Cornell's 13<sup>th</sup> president inauguration faculty reception, Cornell Perkins Prize

**Other:** Radio show hosting, intramural sports