

# RAYMOND PANG

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## Education

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### UNIVERSITY OF MICHIGAN

*Graduating April 2020*

*B.S. Data Science, concentration in Computer Science*

#### Computer Science Coursework:

- Data Structures & Algorithms (C++)
- Database Management Systems (SQL, MongoDB)
- Web Systems (Python, Javascript)
- Computer Security

#### Data Science Coursework:

- Applied Regression Analysis
- Data Mining (R)
- Data Manipulation (Python)

## Experience

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### Prof. Alanson Sample, University of Michigan

Ann Arbor, MI

*Software Engineering Researcher*

*January 2020 – Present*

- Built UI interface that used sensors connected to Teensy to track movement of household objects, then trained data on support vector machines to classify different types of interactions with objects using Python's Kivy library
- Deployed the mentioned interface to Prof. Sample's students, collected user feedback, and maintained the public repository ([https://github.com/pangr-qwns/kivy\\_research](https://github.com/pangr-qwns/kivy_research))

### New York Mortgage Trust

New York, NY

*Software Engineering Intern*

*June 2019 – July 2019*

- Saved traders from manually joining data in Excel by developing a GUI application using the PyQt library that loaded Excel sheets and allowed traders to quickly join sheets
- Brought power of data exploring to higher executives by building pipeline of AWS S3 crawlers using the boto3 library to organize pools of loan data that allowed for dashboard creations in Tableau
- Automated asset management workflow by creating crawlers to record monthly mortgage data from mortgage servicers and inserting data into internal database using shell scripting, Python and SQL

### Capital One

Arlington, VA

*Software Engineering Summiteer*

*May 2018*

- Worked in team of five to as frontend designer to prototype a mobile web app built with Ruby on Rails that scans item barcodes and allows user to checkout
- Created webpage that predicts most common emergency dispatch type given a zip code and time of day based on training data, winning an invite to the Capital One Software Engineering Summit

## Relevant Projects

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### Instagram, Remade

*September 2019 - October 2019*

- Implemented an Instagram clone with static HTML templates that used Jinja and Python's Flask library to render templates with hardcoded JSON data
- Added server side dynamic pages using SQLite to grab JSON data, adding interactive features like comments, creating users, liking, and posting
- Expanded on the project with client side dynamic pages using JavaScript and AJAX to call my REST API, allowing for a smooth user experience that resembled a social media platform like Instagram