

Ethan Yee

APPLIED COMPUTING MAJOR (COMPUTER SCIENCE) · UNIVERSITY OF WASHINGTON

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Education

University of Washington

Bothell, Washington

BACHELORS IN APPLIED COMPUTING (COMPUTER SCIENCE)

Sep. 2019 - Mar. 2023

- **Concentration:** Data Science · **GPA:** 3.68/4.00 · Annual Deans List
- **Coursework:** Algorithms and Data Structures · Statistics · Data Visualization · Data & Society · Technical Writing · Software Engineering · Hardware & Operating Systems · Intro to CyberSecurity · Database Systems

Skills

Programming Python · C++ · Java · Javascript · Bash · SQL · R · React.js · HTML/CSS · NoSQL · Node.js
Concepts Data Structures · Algorithms · Regression Analysis · Data Analytics · Probability · Statistics
Toolkit Jupyter Notebook · Excel · MS Access · Unix/Linux · GitHub · Docker · Tableau · XCode

Work Experience

Apple Inc.

Cupertino, California

ENGINEERING INTERN

Sep. 2021 - Present

- Responsible for managing research and development for Daisy's data pipelines and synthetic data generation
- Implemented **statistical modeling** techniques to improve usability, efficiency, and accuracy of object detection tools
- Developed and refined **data pipelines** to increase efficiency of **Region Based Convolutional Neural Networks** by **19%**
- Initialized the processes for **synthetic data generation** for training data and models using **Blender** and **MatLab**

Uptone App

New Haven, Connecticut

SOFTWARE ENGINEER INTERN

Aug. 2021 - Sep. 2021

- Optimized queries from **MongoDB** and improved responsiveness of the back-end by **33%**
- Assisted in the development of Uptone's back-end infrastructure and API directly with the **CEO**
- Liaised with front-end and back-end developers to manage functions and application requirements
- Integrated proper Database Management practices to ensure user data is secured and available

Sensors, Energy, and Automation Laboratory

Seattle, Washington

RESEARCH ASSISTANT

Jan. 2021 - Jun. 2021

- Created an Android app using **Java** that detects food and estimates the calories on a plate based on **Convolutional Neural Networks**
- Performed **regression** and **time series analysis** on unemployment trends using visualization packages in **Python**
- Assisted in scientific research on the spread of COVID-19 and presented/analyzed the results using **Time Series Modeling**
- Presented information and laboratory findings to UW partners and affiliates using **Excel**, **Python**, and **MATLAB**

Sensors, Energy, and Automation Laboratory

Seattle, Washington

FULLSTACK DEVELOPER (PROJECT LEAD)

Sep. 2020 - Jan. 2021

- Led a team of 3 front-end and 2 back-end developers to create web applications for laboratory projects
- Created and designed a responsive front-end for different laboratory projects using **React.js**
- Collaborated with back end developers, front end developers, project managers, and laboratory managers to draft technical requirements
- Orchestrated the development lifecycle of a secure API hosted on **AWS Amplify** with **GraphQL**

University of Washington

Seattle, Washington

COMPUTER SCIENCE & ENGINEERING TUTOR

Sep. 2019 - Jun. 2020

- **Courses Tutored:** Data Structures & Algorithms · Introduction to Algorithms · Database Management · Data Visualization
- Taught **Data Visualization**, **DBMS**, and **algorithms** to struggling students
- Provided supplemental knowledge in computer science topics for undergraduate CSE students
- Prepared course curriculum and visualized problems for 400 level classes

University of Washington

Bothell, Washington

STUDENT ASSISTANT (TECHNICAL SUPPORT)

Jun. 2019 - Mar. 2020

- Modeled and organized over **2 million dollars** worth of inventory and costs using **Python** and **Tableau**
- Forecast revenue trends for the next fiscal year after the creation of a new parking structure using **linear regression models**
- Performed data wrangling on over **301,463** transactions and **2,000** citation details based on prior parking experiences
- Maintained hardware and software components on parking stations and hand-held parking devices

Projects

Fidelity Stock API

Kirkland, Washington

PYTHON · WEB SCRAPING · APPLICATION PROGRAMMING INTERFACE · DATA ANALYSIS

Jan. 2021 - Present

- Created an API that scrapes prices, statistics, and other information from Fidelity
- Improved Fidelity analysis results using Python's scikit-learn and Time Series Analysis

Food with Friends

Kirkland, Washington

PYTHON · FLASK · REACT.JS · FULLSTACK WEBSITE · DATABASE MANAGEMENT

Jan. 2020 - Sep. 2020

- Created a fullstack web application that allows people and their friends to match with restaurants
- Implemented Yelp's API, Google's Geo-location API, and a ranking algorithm to curate a list of recommended restaurant for friends