ECHO WANG

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EDUCATION

Carnegie Mellon University, *Pittsburgh, PA* **GPA: 3.8**
B.S. in Computer Science • Expected May 2020

- **Dean's List**, School of Computer Science: Fall 2016, Spring 2017, Spring 2018
- **Relevant Coursework:** Machine Learning, Principles of Software System Construction, Introduction to Computer Systems, Functional Programming, Parallel and Sequential Data Structures and Algorithms, Probability Theory and Random Processes, Great Ideas in Theoretical Computer Science
- **Teaching Assistant** for Principles of Software System Construction (Fall 2018)

EXPERIENCE

UnitedHealth Group Software Engineer Intern *May 2018 - Aug 2018*
Optum Technology Development Program, Basking Ridge, NJ

- Worked on a streaming process that will replace 24-hour batch updates of provider data to enhance performance and enable more powerful search capabilities.
- Solely responsible for designing and implementing an API that searches, retrieves, and joins streamed data across multiple Elasticsearch indexes.
- Wrote scripts for comparison and performance testing using Postman and Python that were added to the company's tool repository.

PROJECTS

Oratio | *Optum Hackathon, June 2018*

- Built an Amazon Alexa skill that provides doctors with easy access to patient data as well as information on prescriptions and drug-drug interactions. Developed using Amazon Simple Notification Service for text message verification, Apache Hive for patient data, and various APIs for additional drug information.

Financial Charting and Analysis

- *Summer 2017* — Analyzed data gathered from the Google Finance API using Python and libraries such as pandas and matplotlib; backtested simple algorithms following basic trends and technical indicators as an introduction to algorithmic trading.
- *Summer 2018* — Built a web app for visualizing real-time and historical stock data using React and deployed it to Heroku at eggcharts.herokuapp.com.

Fun with Words | *Hack 112, Carnegie Mellon University, Fall 2016*

- Created a learning app aimed at helping kids with dyslexia practice reading and writing; implemented three mini-games using Python with OpenCV and Tkinter.
- Winner of Best Open CV Hack.

Snowy Slopes | *Fundamentals of Programming Term Project, Fall 2016*

- Designed and implemented a side-scroller sledding game, complete with a custom 2D physics engine, using Pygame, Python, and Photoshop.

SKILLS

Python, Java, C, SML, HTML5/CSS3, JavaScript, Git, LaTeX, Adobe Photoshop, Adobe Illustrator