

KAREN SHEN

shen.karen1@gmail.com

<http://karensheh.me/>

(201) 274-9138

EDUCATION

University of Pennsylvania – School of Engineering and Applied Science, Philadelphia, PA

May 2020

Master of Science in Engineering, Data Science

GPA: 4.00/4.00

Bachelor of Science in Engineering, Systems Science and Engineering

GPA: 3.86/4.00

Honors: Dean's List 2016-2019, Victor W. K. Ku Memorial Award, J.P. Eckert Fellowship

Relevant Coursework (current*): Machine Learning, Big Data Analytics, Artificial Intelligence*, Databases*, Data Structures & Algorithms, Optimization*, Stochastic Processes, Signal Processing, Algorithmic Game Theory, Mathematical Statistics

EXPERIENCE

Microsoft, Software Engineering Intern

May 2019 – August 2019

- Wrote declarative extensions in C# for the Azure IoT Connected Vehicle Platform
- Expedited and simplified the process for customers (e.g. OEMs) to add functionality to their vehicles by allowing them to specify payloads via JSON instead of having to write custom code

University of Pennsylvania, Teaching Assistant

January 2019 – May 2019

- Guided students through core probability concepts and problem-solving in Engineering Probability course
- Led recitations, held office hours, answered Piazza questions, and graded homework/exams for about 100 students

Microsoft, Software Engineering and Program Management Intern

May 2018 – August 2018

- Created newsfeed-style application to streamline communication within Azure Capacity, Supply Chain, and Provisioning division using TypeScript and Angular 2
- Built UI, consolidated data, and generated insights for deployment of servers into data centers and identification of bottlenecks along the supply chain

The Wharton School, Research Assistant

May 2017 – August 2017

- Mined 100,000+ financial documents via Python to extract public company data for ML to predict stock performance
- Performed sentiment analysis to measure CEO traits and other intangible firm characteristics using Receptiviti API

Engineering Summer Academy at Penn, Residential Teaching Assistant

June 2017 – July 2017

- Held office hours and graded assignments for over 30 students in Complex Networks, an advanced college course for high school students covering network theory, linear algebra, and MATLAB
- Organized community building social events for class and floor residents

PROJECTS

Holdup. Created education feedback app (mobile and web) with capabilities to submit questions, create polls, and post ratings for courses. Written in Android and JavaScript.

Accelerating Adoption. Built models using ML to predict the likelihood and identify the most important factors contributing to an animal being adopted. Written in Python.

Wikipedia Game. Parsed Wikipedia link data, implemented various graph algorithms, and built basic search engine. Written in Java.

LEADERSHIP

Eta Kappa Nu (IEEE-HKN Honor Society), Chapter President, Senior Advisor

2017-Present

- Led 7-person board that organizes academic, professional, and mentorship programs for EE and CS students
- Launched tech talk series, sponsorship package, weekly newsletter, and faculty dinners
- Doubled invitee to active member conversion

Society of Women Engineers, Vice President of Internal Affairs, Activities Director

2016-Present

- Managed 13-person board through creating communication channels and organizing board bonding events
- Coordinated logistics for annual SWE National Conference trip

SKILLS & INTERESTS

Coding: Java, C#, Python, MATLAB, TypeScript, JavaScript, Angular 2, OCaml, HTML/CSS, Git, MongoDB

Interests: Piano, Flute, Bullet Journaling, Architecture

Languages: Mandarin (Proficient), Spanish (Conversational)