Michelle Ma

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EDUCATION

SWARTHMORE COLLEGE

B.A. IN COMPUTER SCIENCE & HONORS PHILOSOPHY

GRADUATION: MAY 2020

Overall GPA: 3.8 / 4.0 Major GPA: 3.9 / 4.0

AWARDS

2018 Invited Speaker at Bit by Bit conference

2018 Rewriting the Code Fellow

2017 Stanford Innovation Fellow

2017 Google Grace Hopper Scholar

2017 Swat Tank Social Innovation Competition Finalist

2017 FemmeHacks Honorable Mention

2016 Princeton Prize in Race Relations

2016 National AP Scholar

2016 Girl Scout Gold Award Scholar

COURSEWORK

Artificial Intelligence Introduction to Computer Systems Data Structures and Algorithms Introduction to Computer Science Symbolic Logic Linear Algebra Discrete Math

SKILLS

PROGRAMMING

Fluent: Python

Proficient: C++ • C • JavaScript • jQuery • HTML • CSS • &TEX• SQLAIchemy

Tools: Git • Perforce • Unix • JIRA • Mako • Flask • Bootstrap

FOREIGN LANGUAGES

Fluent: English • Mandarin

PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEERING INTERN | AKAMAI TECHNOLOGIES May 2018 – Aug 2018 | Boston, MA

- Collaborated on an incident tracking tool currently used in production by the Platform Operations team to manage over 300 technical incidents
- Integrated a user authentication feature, redesigned user dashboard, and implemented UI changes to the incident update form using Python, Flask, SQLAIchemy, jQuery, HTML5, and CSS
- Presented project updates to the VP of Platform Operations on a biweekly basis

COMPUTER SCIENCE TEACHING ASSISTANT | SWARTHMORE

May 2017 – Present | Swarthmore, PA

- Assist students in CS35: Data Structures and Algorithms, taught in C++
- Host weekly Office Hours to help students with fundamental concepts and debugging code

BUSINESS DEVELOPMENT INTERN | ER ACCELERATOR

June 2017 – Aug 2017 | New York, NY

- Joined the founding team of TireAgent, an early-stage automotive tech startup accepted to NYC's Entrepreneurs Roundtable Accelerator Summer 2017 program
- Worked alongside CEO on product design and user onboarding/acquisition

LEADERSHIP

OUTREACH DIRECTOR | WOMEN IN COMPUTER SCIENCE

May 2017 – Present | Swarthmore, PA

- Secured \$5,000 in conference funding by partnering with the Sigma Xi, The Scientific Research Honor Society
- Organized an "Alumni Spotlight" lunch to help members navigate diverse career paths in technology

FOUNDER & EXECUTIVE DIRECTOR | THE SPEAK UP INITIATIVE

June 2014 – June 2016 | Washington, D.C.

- Founded, incorporated, and obtained 501(c)3 nonprofit status for Speak Up, an organization committed to spreading free public speaking education
- Managed five Speak Up branches across the U.S.: Virginia, Pennsylvania, Massachusetts, California, and Texas
- To learn more, visit: https://thespeakupinitiative.org/

PROJECTS

AI RECIPE CLASSIFIER | PYTHON

- Created a neural network that classifies cuisines based on recipe ingredients, using Scikit-learn and KERAS machine learning libraries
- Achieved 93% accuracy rate after varying optimizers, loss functions, and number of nodes per layer of the neural network

PAC-MAN Q-LEARNING | PYTHON

- Built a Pac-man Q-learning agent that learns an optimal policy over time through reinforcement learning techniques, given various domains
- Achieved 80% accuracy rate over ten rounds of training