Michelle Zhuang

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Education

Swarthmore College, Swarthmore, PA   **GPA: 3.7, May 2023**

Anticipated BS Engineering and BA Computer Science Double Major

- **Relevant Engineering and Computer Science Courses:** Data Structures and Algorithms, Numerical Methods for Engineering Applications, Electric Circuit Analysis, Computer Architecture, Linear Physical Systems Analysis

Technical Skills:

- **Languages:** Python, C++, Java, JavaScript, HTML, CSS, Verilog, MIPS assembly language
- **Data Analysis:** SQL/MySQL, Tableau, Stata, Matlab
- **Misc/Tools:** Microsoft Office Suite, Google Suite, Autodesk Fusion 360

Programming and Data Analytics Experience

Personal Website Design (https://michelle-zhuang1.github.io/)   **May 2021 – Present**

- Self-taught HTML, CSS, and JavaScript to design and implement a blog of my projects and passions

Engineering Department, *Swarthmore College*, Swarthmore, PA   **June 2021 – August 2021**

- **Computational Sewing for Sustainability Project:** designed and implemented pattern making program to incorporate with Autodesk Fusion 360, turning 3D models of clothing into 2D patterns which are then laser cut into fabric
    - **Objective:** create accessible and sustainable ways for people to upcycle and repurpose unwanted clothes

Data Structures and Algorithms, *Swarthmore College*, Swarthmore, PA   **September 2020 – December 2020**

- **Query Tool Program:** implemented hastable using a linear dictionary to allow users to search through database of tweets by username and/or date
    - Uses a priority queue to return the tweets in order of popularity
- **Maze Program:** implemented maze solving program with choice of breadth-first or depth-first searches

Data Analytics, *AESOP Academy*, remote   **February 2021 – March 2021**

- Successfully completed intensive professional learning series focused on end-to-end data management methodologies
- Concisely defined client requirements, built costume queries via MySQL, built Tableau data workflows from blending sources, established QA methods to validate reporting results, and created an interactive dashboard for mock client leadership

Work Experience

Resident Assistant, *Swarthmore College,* Swarthmore, PA   **May 2021 – Present**

- Managed administrative duties, such as budgeting, maintenance requests, and incident reports
- Fostered the development of relationships among ethnically diverse undergraduate students

Student Academic Mentor, *Swarthmore College*, Swarthmore, PA   **May 2020 – May 2021**

- Responsible for time management, organization, and study skills of 93 students
- Produced and edited a weekly email to the assigned students with academic advice and resources

Costume Shop Assistant, *Theatre Department,* Swarthmore, PA   **September 2019 – May 2020**

- Measured, sewed, and altered 20+ costumes that showcased in campus Theatre productions

Tutor, *Dare2Soar*, Chester, PA   **September 2019 – May 2020**

- Strengthened fundamental arithmetic skills in 20-30 elementary school students of the Boys and Girls Club of Chester

Leadership Experience

DECA Club, *Auburn High School*, Auburn, AL   **August 2017 – May 2019**

- Led start-up business plan module that placed 3rd at the Alabama State Conference
- Led team of 14 volunteers to organize a food drive, donating over 1500 cans to the East Alabama Food Bank

Coordinator and Volunteer, *East Alabama Medical Center*, Auburn, AL   **August 2017 – May 2019**

- Initiated and led "Project Linus," a donating 300+ blankets to local children

Additional Information

Awards: The Helen North Scholarship, Frances Velay Women's Science Research Fellowship
Languages: Native English, Conversational Mandarin Chinese, Intermediate French
Activities: Swarthmore Chorus, Garnet Singers, Library Reserves Assistant (Spring 2020)
Interests: Upcycling thrifted clothes, Chinese Folk Dance, Singing, Baking, Romantic Comedies