Aafaf Sophia Moustafa

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https://asmoustafa.github.io/Portfolio/

EDUCATION

University of Michigan   **Ann Arbor, MI**
- ***Bachelor Degree:*** *Computer Science*   June 2025
- ***Bachelor Degree:*** *Information Science: User-Experience Design*
- **GPA:** 3.8/ 4.0
- Proficient in C++, Python, HTML, CSS, JavaScript, and a novice in Figma

Washtenaw Community College   **Ann Arbor, MI**
- ***Associates Degree:*** *General Studies in Math and Natural Sciences*   May 2021
- ***Associates Degree:*** *Liberal Arts Transfer*
- **GPA:** 3.98/ 4.0

Washtenaw Technical Middle College   **Ann Arbor, MI**
- *Highschool Diploma*   May 2021
- **GPA:** 3.97/ 4.0

DEVELOPMENT AND DESIGN EXPERIENCE

- **Traveling Salesperson and Knapsack**   **April 2023**
  - Became proficient in the use of high-level sorting and path-finding algorithms and dynamic programming
  - Calculated the MST, researched and implemented algorithms to prioritize speed and approximate the TSP
  - Utilized a branch and bound algorithm to calculate the optimal weight of the TSP
- **Relational Database**   **March 2023**
  - Advanced expertise in elaborate data structures as well as optimizations of time and space
  - Created a complex data structure, leveraging hash tables to efficiently store and retrieve data pragmatically (SQL)
- **Machine Learning**   **June 2022**
  - Developed a program to automatically identify the subject of forum posts via natural processing and ML techniques
  - Efficiently used recursion, binary search trees, and dynamic memory
- **Image Resize Program**   **May 2022**
  - Built a program to crop images in a content-aware fashion: sifts through content to remove unimportant pixels
  - Created a seam-carving algorithm and mastered debugging, pointers, linked structures, and best practice testing
- **UX Design: Dearborn Administrative Center Case Study**   **March 2023**
  - Led a team of student designers and researchers to create an efficient flow of movement in the government office
  - Analyzed social dynamics and human behavior to better understand and design persuasive messages
  - Created solution based campaigns to solve behavior-change problems utilizing persuasion and influence strategies
- **UX Design: Portfolio Website**   **November 2022**
  - Programmed with HTML, CSS, and JavaScript with flex and grid structures and media queries to ensure compatibility with all screen widths.
  - Completed usability testing to ensure its functionality and accessibility for online inclusivity

LEADERSHIP EXPERIENCE

ISLAMIC CENTER OF ANN ARBOR   **Ann Arbor, MI**
Youth Committee Lead   January 2021 - Current
- Collaborated with a team to organize events to foster community bonding and develop safe spaces
- Served as community liaison, facilitating engagement and interaction between individuals and the center

MASH MAGAZINE   **Ann Arbor, MI**
Web Design Chair   January 2023 - Current
- Demonstrated proficiency in UX Design and Computer Science principles by enhancing the online platform
- Utilized proper UX heuristics to maximize the user experience, design aesthetic, and maintain an engaging site.

University of Michigan North African Student Association   **Ann Arbor, MI**
Social Media Director and Design Coordinator   August 2022 - August 2023
- Developed and executed media strategy resulting in a 41.4% and 5,650% increase in followers and engagement
- Designed attractive, informative flyers to adequately package core club values into demographic-specific content.

RELEVANT CLUBS: GEECS - Girls in Electrical Engineering and Computer Science, **SWE**: Society of Women Engineers

SKILLS AND AWARDS

- Awarded Summa Cum Laude for maintaining an unweighted GPA above 3.9 while receiving associate degrees
- UofM Olympic Weightlifting focused on strength training heightens mind-body connection and time management skills
- Experienced in Microsoft Word, Powerpoint, and Excel