Nuha **Maharoof**

nuham1@umbc.edu | nuham.github.io | 443-983-0272

Education

University of Maryland, Baltimore County (UMBC) — *Baltimore, MD*
GPA: 3.6 | President's Honors List, 3 Semesters (2020) — *2018 – exp. 2022*
B.S. in Computer Science | Minor in Information Systems

Relevant Coursework (2018 – Present):

- Data Structures
- Computer Architecture
- Operating Systems
- Human – Computer Interaction
- Software Engineering I
- Artificial Intelligence
- Statistics for Scientists/Engineers
- Management Science

Key Skills

Languages: C++, Python, Java, HTML, CSS, x86 Assembly (NASM), R
Tools: MS Visual Studio, NetBeans, Eclipse, Xilinx, GitHub, MATLAB, Adobe Creative Suite
Nontechnical: Creativity, Collaboration, Problem Solving, Entrepreneurship, Time Management

Experience

Undergraduate Research Assistant (Human-Computer Interaction) — *Baltimore, MD*
Bodies in Motion Lab at UMBC Interactive Systems Research Center — *2021 – Present*

- Investigating telemonitoring and remote instructional communication in medical training simulations
- Transcribing, coding, and analyzing different types of data through statistical analysis

Undergraduate Teaching Fellow — *Baltimore, MD*
University of Maryland, Baltimore County — *2020 – Present*

- Holds virtual office hours for students in Computer Science I, Computer Science II, and Data Structures (Python, C++)
- Tutors students, providing them with meaningful and constructive feedback on their code

ASPIRE Intern — *Laurel, MD*
Johns Hopkins University Applied Physics Laboratory — *2017 – 2018*
Assisted in the development of network routing models within cloud infrastructure and creation of visual representation of the models using CORE (Common Open Research Emulator) software, for tactical use

Graphic Designer & Vector Artist — *Baltimore, MD*
Self-Employed — *2016 – Present*

- Opened an online freelance business to sell custom art to be used for logos, apparel, etc.
- Collaborated with clients to create designs to their specifications using Adobe Creative Cloud services

Accomplishments

Grand Prize Winner – Hackathon for Social Justice
National STEM Collaborative - *Laurel, MD*

- Designed a mobile app prototype that functioned as an interactive learning tool to combat implicit bias in hiring and recruitment
- Pitched the app to an audience of potential sponsors at the 2nd Annual Women of Color STEM Entrepreneurship Conference in Phoenix, Arizona

Programming Projects

Route Optimizer | UMBC, Data Structures
Coded a program to return the most optimized bus routes given the route names, stop locations, stop earning, and maintenance costs. The software is intended for transportation agencies to maximize profits.

Text Encryption | UMBC, Comp Org. & Assembly Language
Coded a menu-driven program to encrypt text messages using two substitution cyphers: shift and mirror encryption. Coded in NASM Assembly on x86-64 architecture.

Range Average Query Calculator | UMBC, Data Structures
Coded a program using C++ that implemented two solutions for the Range Average Query problem: one using dynamic programming and one using block decomposition.

Sudoku Game & Solver | UMBC, Computer Science II
Coded a Sudoku game and solver function in C++. Features include alerted player of an incorrect move, the ability to undo a move, and the ability to auto-solve the puzzle.

Extracurriculars

Society of Women Engineers (UMBC) | Member — *2019 - Present*
HackUMBC | Member — *2018 – 2019*
Women of Color STEM Entrepreneurship Conference | Presenter — *2017*