

Musa Haydar

Ann Arbor, MI | musah@umich.edu | musah.net

EDUCATION

University of Michigan Ann Arbor, MI
M.S. in Computer Science 2022 - 2023

- **GPA: 3.85. Coursework:** Compilers, Programming Languages, Algorithms, Artificial Intelligence

University of Michigan Ann Arbor, MI
B.S. in Computer Science, Minor in Music 2019 - 2022

- **GPA: 3.93**, James B. Angell Scholar (Mar. 2021), EECS Scholar (Apr. 2021, Apr. 2022)
- **Coursework:** Operating Systems, Distributed Systems, Computer Networks, Web Systems

EXPERIENCE

University of Michigan September 2022 - May 2023
Graduate Student Instructor Ann Arbor, MI

- EECS 370: Introduction to Computer Organization

Capital One June 2022 - August 2022
Software Engineer Intern Plano, TX

- Designed and implemented an AWS Lambda to validate data between databases (Python)
- Implemented failure detection of a loan data consumer application with automated email notifications

University of Michigan, Kasikci Lab May 2021 - May 2023
Research Assistant Ann Arbor, MI

- Participated in research on crash-consistency bugs in persistent memory systems
- Extended persistent memory databases and data structures, integrated into build system (C, C++)

PROJECTS

KOMPARE | *C/C++, LLVM, KLEE* | *Master's Thesis* 2023

- Extended the KLEE symbolic execution engine to compare two program versions for patch comparison
- Completed a master's thesis discussing the design, implementation, and evaluation of the work

False Alarm | *Unity, C#* | *Hackathon* 2021

- Created a fast-paced puzzle game on a team of 9 for a 48-hour game dev. hackathon; awarded 1st place
- Collaborated on design, implementation, and incorporation of gameplay systems and mechanics

Contactless | *React Native* | *Coursework* 2021

- Created a React Native application to share contact info. using QR Codes; published on Google Play Store

LEADERSHIP

WolverineSoft | *Game Development Student Organization* 2021 - 2023
President (2022), Officer (2021)

- Organized and hosted events, hackathons, and workshops, presented on topics in game design and development
- Coordinated and led weekly board meetings, created avenues for interested members to join leadership

Muslim Engineering Society 2021 - 2022
Social Chair

- Coordinated and collaborated with various student organizations for social and networking events

TECHNICAL SKILLS

Languages: C, C++, Python, C#, Go, Java, JavaScript, PHP, SQL, HTML/CSS

Tools: LLVM, KLEE, Bash, Git, Shell Scripting, gdb, CMake

Frameworks: Unity, Flask, React, React Native