

Yusuf Haydar

hayusuf@umich.edu | hayusuf.notion.site | github.com/hayusuf | linkedin.com/in/hayusuf

EDUCATION

University of Michigan, Ann Arbor

Aug. 2021 – May 2025

B.S.E in Computer Science

GPA: 3.53/4.00

- **Relevant Coursework:** Data Structures and Algorithms, Machine Learning, Web Systems, Computer Security, Human-Centered Software, Computer Organization, Computer Science Pragmatics, Technical Communication

EXPERIENCE

UM Diversity Research and Policy Program

Ann Arbor, MI

Employee

Apr. 2024 – Present

- Updated and added CSS design changes to DRPP WordPress website with automatic scroll functionality

Research Assistant

Mar. 2024 - May 2024

- Analyzed finely tuned research study search index, on its ability to yield studies and academic research papers related to broadening the STEM participation in grades K through 12 within under-served communities
- Supported development team in preventing index from offering irrelevant results by testing and reporting findings

ALDI USA

Aurora, IL

NIT Intern

May 2024 – Aug. 2024

- Built user-friendly *Query Tool* application interface for querying PostgreSQL and Microsoft SQL store databases
- Aided team processes and increased common ticket resolution times to be completed 7.5 times faster with tool
- Learned internal tools and store technology stacks, and QA tested internal organization task management software

Effective Altruism UMich

Ann Arbor, MI

AI Safety Fundamentals Fellow

Sep. 2022 – Dec. 2022

- Student-led seminar program addressed the critical issue of aligning advanced AI with human values
- Explored concepts in machine learning, language models, AI interpretability, specification gaming, AI governance

PROJECTS

EventsHub | *React, Flask*

- Built full-stack UMich event recommender using Microsoft Azure hosted GPT-4 API during MHacks Hackathon
- Offered tailored event recommendations based on users' interests and updated JSON event data online in real time

Dorm Heating Simulator | *C++, MATLAB*

- Developed program to optimize dorm room temperature with varying heater placements and window locations
- Applied heat conduction and transfer algorithms, utilizing matrix classes for room dimensions and temp. data
- Collaborated with University faculty to create a MATLAB graphic depicting temperature levels in the room

Auto-Inv | *Python*

- Conceptualized and implemented an automation script, streamlining inventory processes and record-keeping for a liquidation business, decreasing the initial product data cataloging process duration by a factor of 5x
- Extracted current data and images from online market sites, and edited Excel spreadsheets for data recording
- Utilized Python libraries, including openpyxl, pillow, BeautifulSoup4, urllib3, selenium, and requests.html

Forensics | *Autopsy, Wireshark, Ghidra*

- Conducted in-depth analysis on live and dead images from a suspect's Debian system to unearth evidence
- Expertly navigated through numerous encrypted files, employing John the Ripper to crack codes and reveal concealed files, zip folders, and hidden text within images using advanced steganography techniques
- Scanned the packet capture history of the suspect using Wireshark, employing techniques such as length extension attack, SQL injection, and user-agent spoofing to unveil suspicious network communications and successfully uncovered hidden communications within a chat room, providing valuable insights into the suspect's activities

SKILLS

Languages: C++, C, Python, MATLAB, PowerShell, HTML, CSS, SQL, Assembly, Go, C Java, JavaScript

Developer Tools: React, Flask, Django, VueJS, Figma, Docker, Shell Scripting, AWS, Linux