# Youssef Abdulle

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# EDUCATION

## University of Minnesota — Twin Cities

May 2026

Bachelor of Science in Computer Science

GPA: 3.60

Relevant Coursework: Data Structures and Algorithms, Software Engineering, Operating Systems, Software Design and Development, Computer Architecture, Internet Programming, Databases

Honors & Awards Fall 2023

College of Science & Engineering Dean's List Recipient

# Leadership & Professional Development

Fall 2023

National Society of Black Engineers, Management Leadership for Tomorrow (MLT), Code2040

#### TECHNICAL SKILLS

Programming Languages: Python, Java, C/C++, JavaScript, HTML/CSS, OCaml Developer Tools: React, Next.js, Flask, Node.js, VS Code, IntelliJ, Git/Github, Eclipse

#### Work Experience

#### Undergraduate Teaching Assistant

Aug 2024 – Present

Minneapolis, MN

University of Minnesota

- Instructed cohorts of 250+ students weekly in introductory Python concepts and systematically tracked student improvements in grading over the semester.
- Coordinated 3 weekly laboratory meetings, implementing discussion-based learning strategies that increased student performance in lab assignments by 30% over the semester
- Led peer review workshops for cohorts of 30 students weekly, boosting collaboration and achieving a 90% satisfaction rate, as highlighted in anonymous surveys, which increased engagement in subsequent sessions

## Projects

#### AI Customer Support Chatbot | JavaScript, Next.js, React, Meta Llama API

Github

- Led frontend development for a 4-person team, creating an AI customer support chatbot with Next.js and React, overcoming challenges with integrating complex UI components to ensure a modern and accessible user interface.
- Integrated Meta Llama 3.1 open-access API to enable context-aware responses, overcoming challenges related to handling diverse user queries and improving response accuracy by 20%.
- Validated the chatbot's performance through thorough testing and debugging, resulting in a 30% improvement in response accuracy and overall reliability.

## Internship Aggregator Tool | Python, BeautifulSoup, pandas, Discord API

Github

- Engineered a web scraping program using BeautifulSoup to extract and organize dozens of internship postings daily, implementing robust error handling to manage adaptive content updates and frequent site changes.
- Developed a Discord bot integrated with the program to provide hourly updates on new postings and offer interactive commands for filtering opportunities, achieving 100 student users, resulting in 20 interviews
- Utilized pandas to design a structured table format for the extracted data, enhancing accessibility for over 100 students and reducing their average search time for internship opportunities by 40%.

# Spell Checker | C Github

- Developed a C-based Spell Checker, utilizing a hash table data structure and leveraging variable memory management and file I/O to simplify program compilation.
- Optimized memory efficiency with the usage of malloc and free combined with a Makefile for efficient code compilation and automated testing, ensuring functionality and correctness of the spell checker.
- Implemented a command-line interface for dictionary manipulation, spell checking text files, and supporting optional command line arguments.