Yousif Elfaki

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EDUCATION

Virginia Tech|December, 2025
Bachelor of Science in Computer Science
Relevant Coursework: Discrete Mathematics, Applied Combinatorics, Computer Organization, Software Design & Data Structures, Data Structures and Algorithms, Mobile Software Development (Android), GUI Programming/Graphic, Formal Languages and Automata Theory, Computer Systems
Honors & Awards: Dean's List Fall 2024

PROJECT EXPERIENCE   [GITHUB]

Cush|Customizable Shell
- In partnership with a teammate, engineered a customizable Unix shell that integrated key system programming concepts such as job control, signal management, and command parsing - delivering a practical tool for managing concurrent processes and terminal I/O.
- Selected Project Experience:
  - Team Collaboration
    - Played an integral role in a two-person team to develop a Unix-style shell, focusing on job control features like foreground/background execution and process group management.
    - Developed robust mechanisms to intercept and manage asynchronous signals, enhancing system responsiveness and stability during process termination and suspension.
    - Crafted advanced signal handling routines to correctly process SIGCHLD, SIGINT, and SIGTSTP signals, ensuring proper cleanup and state transitions for both foreground and background jobs.

Personal Portfolio|Portfolio
- Developed a comprehensive, responsive portfolio using HTML, CSS, and JavaScript that serves as a central hub for my web development projects, demonstrating my evolution from foundational to advanced skills.
- A basic HTML & CSS sample e-portfolio that established core design principles and user-friendly navigation.
- A high-fidelity Tesla clone website built with HTML, CSS, and JavaScript, featuring interactive elements and modern design aesthetics to replicate a cutting-edge user interface.
- A robust React-based eCommerce application (Manga Library) that leverages advanced state management.
- Utilized interactive features on my portfolio - such as animated backgrounds, modal overlays, and smooth scroll transitions - to enhance user experience, reflecting best practices in modern web development.

LEADERSHIP AND EXTRACURRICULAR

Google Development Student Clubs at Virginia Tech|Blacksburg, Virginia
August 2022 – December 2022
Core Team Member
- Collaborated as one of four core team members under a designated team lead to support club initiatives.
- Developed and conducted interactive workshops focused on Google technologies, providing students with comprehensive training on tools like Google Cloud, Firebase, and Flutter.

SKILLS & INTERESTS

Skills: C, Java, Python, JavaScript, Git, React, HTML, CSS (flexbox), Firebase, LaTeX, Problem-solving, Communication, Quick learner.
Certifications & Training: Harvard CS50 course