Owen Akers

oakers1@jh.edu | (980) 253-1605 | www.linkedin.com/in/owen-akers

EDUCATION

Johns Hopkins University Expected May 2028

B.S. Candidate in Computer Science and Applied Mathematics GPA: 3.81/4.0

- **Relevant Coursework:** Data Structures and Algorithms, Full-Stack JavaScript, Intermediate Programming (C & C++), Honors Discrete Mathematics, Linear Algebra, Ethics of AI and Automation
- Varsity Men's Tennis

SKILLS

Languages: Python, C++, JavaScript, TypeScript, SQL, Java, C

Frameworks: React, React Native, FastAPI, Tailwind CSS, Django

Tools: Git, Docker, PostgreSQL, Firebase, Bitbucket, Confluence, Jira, DBeaver, Cypress

EMPLOYMENT

Lowe's Companies, Inc. Charlotte, NC

Software Engineer Intern May 2025 - Present

- Engineered and launched an internal, high-traffic React and TypeScript web application used by 300,000+ store associates to showcase Lowe's Technology Hub.
- Wrote efficient SQL queries and utilized FastAPI endpoints to manage data in a PostgreSQL database, supporting backend functionality.
- Improved application security by identifying, triaging, and remediating code vulnerabilities reported by the Snyk static analysis tool.
- Enhanced user search efficiency by designing and implementing a dynamic filtering UI in React for over 50 datasets, featuring advanced sorting and search capabilities.
- Ensured platform stability and maintainability by utilizing CI/CD pipelines with Docker and achieving 95% test coverage with Cypress.

Swish (Startup) Baltimore, MD

Software Engineer Aug 2024 - Present

- Drove development of the core MVP, building the application from concept and acquiring a pre-launch waitlist of over 1000 users.
- Spearheaded the integration of QR code scanning features to enhance the core in-store product discovery experience.

PROJECTS

Chess Engine

https://github.com/jhu-ip/2025-spring-final-anath3-oakers1-alee297

- Built a fully functional terminal-based chess game in C++, implementing standard rules and game logic for two-player gameplay.
- Applied object-oriented programming principles to model pieces, validate moves, and manage board state without reliance on external libraries.

Image Processing CLI Tool

https://github.com/jhu-ip/2025-spring-midterm-anath3-oakers1.git

- Created a C-based command-line tool for image manipulation (blur, crop, invert) on binary PPM files using structs and dynamic memory allocation.
- Practiced systems-level programming by managing binary file I/O, debugging with GDB, and structuring the project with Make and Git.

LEADERSHIP

Cyberbirds Baltimore, MD

Secretary & Lead Web Developer Jan 2025 - Present

- Develop and maintain the club website accessed by 75+ members, providing updated resources and announcements.
- Host technical discussions and workshops on topics such as network security, cryptography, and ethical hacking.
- Spearheaded monthly Capture The Flag (CTF) team practices, analyzing and solving challenges in web exploitation.