John Eakes

(336) 500-1077 | jpeakes@ncsu.edu | LinkedIn/JohnEakes | github.com/John-Eakes | johneakes.com | Raleigh, NC

EDUCATION

B.S. in Computer Science, | North Carolina State University, Raleigh, NC

Expected May 2028

GPA: 4.0/4.0

• **Relevant Coursework:** Data Structures and Algorithms, Software Development Fundamentals, C and Software Tools

TECHNICAL SKILLS

Programming Languages: Java, Python, C, JavaScript, HTML/CSS

Technologies: Git, GitHub, Jenkins, IntelliJ, VSCode, Eclipse, Makefile

Concepts: Object-Oriented Design, Full-Stack Development, Data Structures & Algorithms, File I/O, State Management,

SDLC, Testing & Debugging

TECHNICAL EXPERIENCE

Information Security Research Intern | North Carolina State University | Raleigh, NC

Aug. 2024 - Dec. 2024

- Synthesized 6 peer-reviewed security studies to formulate actionable strategies, identifying that 2FA implementation reduces compromise risk by \approx 400%.
- Built a responsive research showcase using AI-assisted development tools to cut design and debugging by 50%.
- Delivered a production-ready application that improved research accessibility and visibility for 200+ students.

TECHNICAL PROJECTS (PROJECT PORTFOLIO: JOHNEAKES.COM)

Wolf Hire Management System | Java, Swing GUI, State Pattern, File I/O

- Engineered a hiring workflow engine utilizing **State and Singleton patterns** to manage 7 distinct application states with validated transitions.
- Implemented a **custom JSON serialization/deserialization layer** for persistent data storage, ensuring data integrity for job positions and candidate applications.

WolfTickets Management System | Java, Custom Data Structures, File I/O

- Developed a hierarchical ticket management system using custom, generics-based data structures (SortedList, SwapList) to optimize data organization and retrieval.
- Designed a **File I/O format** for parsing and tokenization for serializing complex **category-ticket relationships**.

NC State Park Travel System | C, Dynamic Memory, File I/O

- Built a **CLI application** with **dynamic memory management** and **pointer-based data structures** to efficiently query and search NC State Park data.
- Achieved 100% test coverage on 22 unit tests via test-driven development(TDD).

PROFESSIONAL EXPERIENCE

A Cleaner World | High Point, NC

June 2023 - Jan 2025

Customer Service Associate

- Processed 2000+ customer orders weekly with 99% accuracy using POS and inventory management systems.
- Analyzed operational workflows to identify and resolve systemic input errors, leading to a 30% reduction in customer complaints and improved process efficiency.
- Managed financial transactions and end-of-day reporting, ensuring accountability and precision in a high-volume environment.

LEADERSHIP & INVOLVEMENT

Trip Leader | BackPacking Club, NC State University | Raleigh, NC

Aug. 2024 - Present

- Lead and coordinate multi-night backpacking expeditions for groups of 8-15, responsible for all safety logistics, route planning, and team dynamics.
- Cultivate strong problem-solving and decision-making skills by adapting to unpredictable environments.