## Layden Halcomb

(573) 707-1874 | <a href="mailto:lhalcomb@drury.edu">lhalcomb@drury.edu</a> | <a href="mailto:LinkedIn">LinkedIn</a> | <a href="mailto:GitHub">GitHub</a>

#### Education

Drury University, Springfield, MO | GPA: 3.96 | Dean's List

B.S., Computer Science | B.A., Mathematics Anticipated May 2026

Relevant Coursework: Drury University, Springfield, MO

Data Structures & Algorithms, Spring 2023, Fall 2023

Application Development I & II, Fall 2023, Spring 2024

Intro to ML, Artificial Intelligence, Fall 2024, Spring 2025

Mathematical Statistics & Probability, Fall 2025, Spring 2026

## **Technical Projects**

**Java Data Structures & Algorithms:** Self-studied Java and implemented various data structures and algorithms, building proficiency in low-level programming (Summer 2023).

**Embedded Systems:** Completed multiple projects focused on low-level software to deepen understanding of embedded systems. (Summer 2024)

Sudoku Solver - Python (Pygame) & C++

**Technologies**: Python, Pygame, C++, Algorithm Design, Data Structures

- Developed a visual Sudoku solver using Pygame to display solving logic in real time.
- Implemented Dancing Links (DLX) for efficient puzzle solving.
- Recreated solver in C++ using Dancing Links (DLX) to enhance performance and memory control.
- Gained experience in low-level debugging and optimized data structures for algorithmic efficiency.

## **Coursework Projects**

**Weather App Development:** Created weather applications with backend database connectivity, enhancing skills in application development (Fall 2023 - Spring 2024).

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**KiiP (Key Income Investment Planner) App Development:** Developed an application to a degree of Minimum Viable Product that kept track of financial spending transactions on demand. Enhanced skills in API's, React, and Typescript.

#### Handwritten Digit Classification using CNNs & RNNs

Technologies: PyTorch, Scikit-learn, MNIST Dataset, NumPy, Matplotlib

- Designed and trained Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs) to classify handwritten digits (0-9) using the MNIST dataset.
- Utilized **PyTorch** for model building and training, implementing custom training loops and evaluation metrics.
- Conducted data preprocessing and augmentation using Scikit-learn and NumPy to improve generalization.
- Compared model architectures and performance using validation accuracy and confusion matrices.

Additional projects can be discussed upon request.

## **Leadership & Experience**

#### **Teaching Assistant, Intro to Computer Science**

Drury University, Springfield, MO | Spring 2024

Supported students in Python programming, data structures, and algorithmic concepts, providing individualized guidance.

Assisted with lab sessions and grading, improving communication and mentorship abilities.

#### Shift Leader, Panda Express

(2021 - Present)

Strengthened leadership and interpersonal skills, and honed abilities in attention to detail, communication, and active listening through team collaboration and customer interactions.

#### Technical Skills

Languages: Python, Java, C++

Framework/ Tools: React, Typescript, Expo, Git, VS & VS Code, Excel

Concepts: OOP, Data Structures, API Integration

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**Other**: Version Control, Database Integration, Embedded Systems, Machine Learning, OS (Ubuntu, MacOS, Windows)

# **Activities & Societies**

Drury Indie Game Studio
AMS/MMA Missouri State Collegiate Mathematical Contingent (2023, 2024)
Kappa Mu Epsilon (Mathematics Honor Society)