# **Aaron Lewis**

630.699.5530 | alewis25@nd.edu | aaronmlewis.com

#### **EDUCATION**

University of Notre Dame | Notre Dame, Indiana

Graduation May 2026

Bachelor of Science in Computer Science, Minor in Engineering Corporate Practice

GPA: 3.96

Dean's List 2022, 2023, 2024

University of Notre Dame | London, England

May - June 2023

Engineering Summer Study Abroad

#### **WORK EXPERIENCE**

#### Teaching Assistant | Notre Dame, Indiana

September 2024 – Present

Introduction to Computing

- Assisted students in understanding fundamental programming and computer science concepts in weekly office hours
- Graded and provided feedback on weekly assignments, ensuring clarity and understanding of course material

# GoodLife Fitness | Glen Ellyn, Illinois (Remote)

June – August 2024

Intern Project

- Configured Microsoft Azure's Spatial Analysis Container to track equipment usage in gym video feeds
- Created Azure resource structure to utilize virtual machines as edge devices performing model computations
- Presented to the CIO of GoodLife Fitness on overall project results and viability

#### Village of Glen Ellyn Public Works Department | Glen Ellyn, Illinois

May - August 2022, 2023, 2024

Seasonal Worker

- Cataloged hundreds of water valves through the utilization of a metal detector to facilitate work in the winter season
- Guided four new seasonal workers through training of safely operating machinery to increase team productivity
- Addressed concerns with residents daily in a face to face and verbal manner to justify government work

#### **COURSEWORK**

### Regular Expression Parser | Python

February – May 2024

- Overcame problems in the implementation of complex concepts through whiteboarding and research
- Iteratively improved pieces of code to achieve a desired time complexity for multiple regular expression operations

#### Assembly Doubly Linked List | RISC-V

February 2024

- Evaluated work with numerous test cases to verify correctness and accuracy
- Built functions in assembly to perform doubly linked list actions by utilizing a call stack

#### **Constellation Model** | Python (TensorFlow)

June 2023

- Led a team of four engineers in building a convolutional neural network with the ability to recognize constellations
- Refined weights and biases in three model structures to achieve the best results given time constraints

# United States Drug Analysis Project | Python (Plotly), HTML, CSS, JSON, CSV

April – May 2023

- Allocated tasks between two team members to take advantage of technical strengths
- Processed data about drug seizures along US borders to extract valuable information, organizing it to our needs
- Developed a website that displays findings from data analysis of three key categories to inform policymakers

### **EXTRACURRICULAR ACTIVITIES**

## Notre Dame Men's Rowing Team | Notre Dame, Indiana

August 2022 – February 2023

- Improved time management by balancing practice schedules averaging twelve hours a week with regular coursework
- Coached teammates on technical performance to promote the success of the team
- Expanded leadership and teamwork characteristics in a completely new and unique environment

# Notre Dame Video Game Development Club | Notre Dame, Indiana

August 2024 - Present

- Designed and implemented various 2D game mechanics using GDScript in Godot, enhancing game enjoyment
- Conducted playtesting and debugging sessions to identify and fix bugs, improving game stability and performance

### Notre Dame Board Game Club | Notre Dame, Indiana

August 2024 - Present

Actively participated in weekly game sessions, fostering a collaborative and engaging environment in a diverse group

### **TECHNICAL SKILLS**

C, C#, C++, Python, Java, MATLAB, HTML, CSS, Docker, Linux, Git, Microsoft Azure, Excel, RISC-V, SOLIDWORKS