# Liam O'Brien

*603-213-0102 | liam.aobrien1@gmail.com | https://www.linkedin.com/in/liamaobrien/*

## Education

**Southern New Hampshire University – GPA: 3.58** Exp. Dec 2025

*Bachelor of Science in Computer Science*

*Macnchester, NH*

## Skills

**Languages**: Python, JavaScript, C++, SQL

**Frameworks**: React, Node.js, Flask, React Native

**Databases**: MongoDB, MySQL, SQLite

**Development Tools:** VScode, Git/Github, Anaconda, Eclipse, Deepnote, Jira, Unity, Arduino

## Projects

**SafeHaven Banking** | *Tech: Expo.go Node.js, React Native, SQLite*

- Led the development team as Scrum Master to create a mobile banking app using Expo Go and JavaScript. Coordinated sprints and retrospectives, ensuring the team met project deadlines.

**Arduino Robot** | *Tech: Arduino IDE*

- Developed a Bluetooth-controlled robot using an Arduino Mega board. Integrated Bluetooth functionality for remote control, gaining hands-on experience in embedded systems.

**Tower Defense Game** | *Tech: Unity*

- Developed a tower defense game using Unity and C++. Acted as Product Owner, managing the development lifecycle while contributing to game design and programming.

## Relevant Coursework

### CS-300: DSA: Analysis and Design

Focused on advanced algorithmic design and analysis of complex data structures. Developed solutions for real-world problems using various non-coding methodologies and algorithmic techniques.

### CS-250: Software Development Lifecycle

Explored the stages of the Software Development Lifecycle (SDLC), with a focus on Agile methodologies. Learned how to develop high-quality software and assessed the importance of documentation and communication in the SDLC process.

### CS-328: Embedded Systems

Covered key aspects of embedded system design, including microcontroller programming, interfacing, and analog circuit integration. Gained hands-on experience working with assembly languages and higher-level system development.

### CS-411: Artificial Intelligence

This course provides an introduction to the theories, methods and problems of AI. Knowledge representation, natural language processing, computer vision, neural networks, path finding (A*, navigation meshes) and machine learning will be covered. Discussion of concepts such as intelligence, cognition, personality, and the Winograd/Turing test will be addressed. Practical implementations will be explored in the context of game AI.

## Extracuriculars

SNHU Esports Program – Valorant Player: Balanced a demanding practice schedule with academic responsibilities, showing strong time management and dedication. Built teamwork, communication, and problem-solving skills in high-pressure, competitive environments.