

CALLUM MACLEAN

Dahlonega, GA • (470) 244-0112

calrossmaclean@gmail.com • [LinkedIn](#) • [Personal Website](#) • [GitHub](#)

COMPUTER SCIENCE STUDENT WITH SOFTWARE ENGINEERING EXPERIENCE

Passionate Computer Science student with experience building production systems across computer vision, backend tooling, and full-stack web development. Shipped internal automation tools at a software startup, an indie game with 100+ downloads, and won CUHackit Clemson Hackathon 2026. Seeking a software engineering internship focused on Computer Vision or AI.

AREAS OF STRENGTH AND EXPERTISE

- Computer Vision
 - Systems Programming
 - Full Stack Development
 - React & Typescript
 - Python & GoLang
 - Game Development
 - Version Controls (Git)
 - API Development
 - Leadership & Coordination
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EDUCATION

Bachelor of Science, Computer Science | University of North Georgia, Spring 2027

Honors: 3.8 GPA, Dean's List, President's List, CUHackit 2026 Hackathon Winner, Microsoft MLSA

Technical Skills: C++, Python, GoLang, TypeScript, JavaScript, React, OpenCV, Git, Microsoft Office Suite

PROFESSIONAL EXPERIENCE

Reddrok Innovation, Remote in Cumming, GA

11/2023 to 12/2024

Software Development Intern

Engineered internal business tools and improved web infrastructure across a fast-paced startup environment. Contributed to full stack development using Python, GoLang, C++, React, and MySQL while collaborating daily with senior engineers in standups to review code and resolve blockers.

Key Accomplishments:

- Reduced invoice processing time by 40% by engineering an automated system built in Python, GoLang, and C++ replacing a previously manual workflow.
- Improved website performance by 18% by refactoring frontend infrastructure using React and JavaScript.
- Delivered 3+ internal tooling projects from design to deployment contributing across the full stack including MySQL database integration.

Pool Management Inc., Woodstock, GA

04/2025 to 09/2025

Head Lifeguard

Supervised and coordinated a team of lifeguards across daily operations, ensuring consistent pool coverage, regulatory compliance, and rapid emergency response. Managed scheduling, team performance, training, and safety protocols.

Key Accomplishments:

- Maintained 100% pool coverage across all shifts by building and managing a reliable scheduling system for over 5 lifeguards.
 - Reduced scheduling conflicts by 30% by introducing a streamlined shift-coordination process, improving teamwork and coverage consistency.
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SELECTED ACADEMIC PROJECT EXPERIENCE

Aurelius – CUHackit 2026 Winner, Team Lead

Led a team of 4 to build an AI and Computer Vision productivity tracker using dual webcams, gaze tracking, and a custom Arduino pressure sensor. Engineered the core backend and pipeline using OpenCV and MediaPipe for real-time detection, integrated Google Gemini for notification classification. Optimized backend deployment on Vultr under 500MB RAM.

Missile-tracker – C++ Computer Vision

Built a real time object tracking system using OpenCV and CMake, capable of running on any standard webcam. Structured with modern modular architecture using CMake and Git for clean, reproducible builds.

Sippin-Sorcer – Published Indie Game

Designed and developed a fully original indie game from scratch using Godot, GDScript, and Python, creating all art, models, and textures independently. Solo marketed the game to over 100 downloads and received several community donations.

Leah's Ladder – React Project

Built an interactive decision-making web app using React, Vite, and TypeScript that simplifies choices through head-to-head preference matchups. Deployed on GitHub Pages with full version control via Git.