

Clay Shumaker

Student

isoptera.lcsc.edu/~cshumaker
github.com/Clayal10

Lewiston, Idaho
208-275-9750
clay_shumaker@selinc.com

Education

Computer Science BS | Lewis-Clark State College

August 2022 – Present, Lewiston ID

Graduating December 2025 (3.98 GPA).

Sat on the promotion board for Computer Science professor Dr. S. Seth Long.

On the Presidential List and have received multiple Academic All-American Awards for Cross Country and Track & Field.

Skills:

Go | C++ | Linux / Bash | Git | Test-Driven Development | Agile | Scrum | REST API
HTML / CSS / JS | React | SQL | Power Systems | Python | Networking | Docker

Experience

Software Engineering Intern / Schweitzer Engineering Laboratories

February 2025 – Present

- Created backend solutions for network communication between protective relays and Synchrowave Operations utilizing Go, Typescript, the IEC 61850 standard, and proprietary protocols.
- Deployed apps with Kubernetes and Docker.
- Employed reliable server-side communication and improved user experience with REST architecture.
- Developed software in a team setting with Git, Bitbucket, and Jira.

Projects

Configurable Neural Network Trainer

github.com/Clayal10/mathGen

Go | Typescript | REST API | Particle Swarm Optimization

A web server that will train a small neural network according to user input. The network learns to calculate the sine value on a domain with the particle swarm optimization machine learning algorithm. The network's estimation is graphed on the web page along with the true corresponding values.

Artificial Intelligence Turn-Based Game

github.com/Clayal10/connect4

C++ | OpenGL | Minimax

A 2d graphical game of Connect 4 where you can play against an AI opponent or watch two entities play against each other. Utilizes minimax with alpha-beta pruning as a selection algorithm and OpenGL for GUI.

3D Game Engine

github.com/Clayal10/game_engine

C | C++ | OpenGL | GLSL

This is a medium to small sized 3D game engine that includes player following entities, collision, physics, and projectiles. The game is set up as a maze with a cat roaming around where it is your objective to find an exit.

Community Involvement

Cross Point Alliance Church / Worship Team

Served on the church's Worship Leader Cohort for musically and technically leading Sunday worship.