Andy Strong

Personal Website | github.com/lightspeed1 | Broomfield, CO | 720-737-5000 | strong.andrew.j@gmail.com

Skills: Python, JavaScript, Git, HTML, CSS, C++, OpenGL, Node.js, Express.js, PostgreSQL

EDUCATION:

University of Colorado at Boulder | *B.S. in Computer Science* | 2021 - 2025 (expected)

- GPA: 3.98
- Relevant Coursework: Algorithms, Data Structures, Discrete Structures, Computer Systems, Linear Algebra, Software Dev. Methods and Tools, Introduction to Robotics

EXPERIENCE:

Co-Director | *Hack CU* | Jul 2023 - Present

- Working with the HackCU club to plan Hack CU 10, the most popular hackathon at CU Boulder. It will take place in the spring of 2024. We anticipate having hundreds of participants, like in previous years.
- Responsibilities: Guiding each of the teams, which include tech (creating and maintaining website), marketing/recruitment, logistics, and finance.

AI Research Assistant | *CLEAR at CU Boulder* | Jun 2023 - Present

- Working with PhD student Mary Martin at CU Boulder's CLEAR lab on natural language processing (NLP) research. We are developing a novel method to encode and process spatial relationships of objects in a 3D environment.
- Notable application: Telling a robot (with human language) to manipulate objects in the environment. Example: "Put the red block on top of the blue block."
- Technologies: Python, Tensorflow, NumPy

Code Sensei | *Code Ninjas* | Jun 2020 - Aug 2023

- Taught kids aged 6 - 14 basic JavaScript through web game development. Worked with other Code Senseis to lead various summer camps and tailor the curricula to the knowledge of the current group.
- Summer camps include, but are not limited to: Making Minecraft modifications using MCreator, Game development in Roblox using Roblox Studio, 3D design using Tinkercad

NOTABLE PROJECTS:

Workout Wizard | Jun 2023 - July 2023

- Developed a full stack workout tracking app (it's live now!). Users can create accounts and add workouts with exercises from the API Ninjas exercise API.
- Users can do workouts and save the number of sets and reps per exercise (stored in Postgres database)
- Technologies used: JavaScript, HTML, CSS, Express.js, Node.js, PostgreSQL. GitHub Link

3D Building Game | Aug 2022 - Feb 2023

- Created a Windows desktop game without a game engine (from scratch) where the player can use a variety of building blocks to create a 3D scene. The player can save these scenes and also destroy them in real time. Project is featured on my GitHub page (with video demo).
- Notable features: Physics Engine, 3D Collision Detection, OpenGL Graphics
- Technologies used: C++, GLEW, GLFW, GLM