

Andy Strong

lightspeed1.github.io | github.com/lightspeed1 | linkedin.com/in/andy-strong | strong.andrew.j@gmail.com | 720-737-5000
Broomfield, CO | **Cleared for SEC (Secret Clearance) based on T3 completed on 06 July 24**

Skills: Python, TypeScript, React.js, Git, HTML, CSS, C++, Node.js, Express.js, PostgreSQL, Ubuntu, NumPy

EDUCATION:

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

- GPA: 3.95
- Relevant Coursework: Algorithms, Data Structures, Discrete Structures, Computer Systems, Linear Algebra, Software Dev. Methods and Tools (web dev), Database Systems, Machine Learning, Advanced Data Science

EXPERIENCE:

Software Engineer Intern | *Sierra Nevada Corporation* | May 2024 - Aug 2024

- Developed communications software (more detail omitted for security reasons) using React + Redux and Ansible.
- Brought deployment time down from **weeks to days (>7x speedup)**

Director | *Hack CU* | Jul 2023 - Present

- Created HackCU 10, the largest hackathon in the Rocky Mountain Region. Last year we had over **120** participants. HackCU 11 is expected to have **200+** participants from multiple countries.
- Accrued over **\$8k** from sponsors, including GitHub.
- Led development of a new website for HackCU 10.
- Increased membership of the group from **1 to 12** organizers.

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

- Working with CS PhD student Mary Martin at CU Boulder's CLEAR lab on natural language processing (NLP) research. I'm currently developing a novel way to encode and process spatial information about a 3D scene, enabling the identification of objects by describing relative information to other objects.
- Technologies + Skills: Python, Tensorflow, NumPy, Ubuntu, ML, AI, NLP

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

- Taught kids aged 6 - 14 basic JavaScript through web game development. Taught multiple **4hr** summer camps as lead sensei, with a junior sensei, with up to **16** kids at a time.
- Summer camps included: Making Minecraft modifications, Game development in Roblox, 3D design, and more.

NOTABLE PROJECTS:

Workout Wizard | Jun 2023 - July 2023

- Developed a full stack [workout tracking app \(it's live now!\)](#) for people who are trying to stay consistent on their health journey. Users can create accounts and add workouts using exercises from the API Ninjas exercise API.
- Learned how to host sites and Postgres databases on [Render.com](#)
- 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. Players can save these scenes and also destroy them in **real time**. Project is featured on my [GitHub page \(with video demo\)](#).
- Wrote **physics simulation** derived from classical mechanics, providing a simple alternative to clunky game engines such as Unreal Engine.
- Technologies used: C++, OpenGL