

DUNCAN BRITT

Boulder, CO

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SUMMARY

Computer Science student. Open to all opportunities. Website: **duncanbritt.com**

EDUCATION

University of Colorado, Boulder
B.S., Computer Science

Expected Graduation: May 2025
Boulder, CO

Arapahoe Community College
A.S., Computer Science, *Summa Cum Laude*

Graduated May 2023
Littleton, CO

TECHNICAL STRENGTHS

Programming Languages	Proficient in C++, C, JavaScript, Ruby Familiar with Scala, Python, Go, Common Lisp, OCaml, and MIPS Assembly Language
Markup Languages	HTML/CSS
Protocols & APIs	HTTP, The Document Object Model
Databases	PostgreSQL
Tools	Git, Emacs, familiar with Docker

EXPERIENCE

Genetic Logic Lab at CU Boulder
Software Developer

May 2023 - Present
Boulder, CO

- The research in the lab focuses on the interdisciplinary synthetic biology work in the overlap between electrical engineering, mathematical modeling, and genetic biology. Working on the creation of genetic design automation programs similar to electronic design automation programs for circuit designs.
- Design, develop and modify software systems.
- Collaborate with others to determine design specifications or details.

Parrent Technology Solutions
Coding Instructor

April 2023 - May 2023
Denver, CO

- Taught a 6-week coding class to children aged 8-11 at Sherrelwood Elementary School.
- Instructed students individually and in groups, using teaching methods such as lectures, discussions, and demonstrations.
- Established and enforced rules for behavior and procedures for maintaining order among the students.

ACC Robotics Team
Lead Programmer

October 2022 - May 2023
Littleton, CO

- Funded by NASA's Colorado Space Grants Consortium, built an autonomous mobile robot.
- Wrote, analyzed, reviewed, and rewrote programs, applying knowledge of computer capabilities and robotics.
- Assigned, coordinated, and reviewed work and activities of programming personnel.
- Trained subordinates in programming.

Arapahoe Community College
Computer Science, Math & Physics Tutor

August 2022 - Present
Littleton, CO

- Provided instruction to individual students to improve academic performance.
- Reviewed class material with students by discussing text, worked solutions to problems, and reviewed assignments.

Third & James Recording Studios
Owner/Partner · Audio Engineer · Session Musician

November 2018 - September 2021
Denver, CO

- Recorded and performed music and speech on recording media, using recording equipment.
- Conferred with producers, performers, and others to determine and achieve the desired sound for a production.
- Identified equipment problems and adapted to them during recording sessions.
- Trained interns in Audio Engineering.

PROJECTS

SeqImprove - Genetic Logic Lab at CU Boulder
Developer

Ongoing
Boulder, CO

- Application for annotating and curating genetic circuits. Delivered a talk about my work on this project at the 15th annual International Workshop on Biodesign Automation, held at Boston University in September 2023.
- <https://seqimprove.synbiohub.org/>

Software Generated Word Ladder Puzzles, Web App
Developer

January 2022
Littleton, CO

- Implemented the full stack including the generation of puzzles, account creation, deletion, login/logout, public leaderboard, and account history. Used PostgreSQL. <https://bit.ly/3nFnR39>

Templating Language for Frontend Web Development
Developer

January 2022
Littleton, CO

- Designed the language, implemented the compiler, (lexer, parser, code-generator), and API using JavaScript. Created the documentation website using the language. <https://bit.ly/3tGgjYl>

Path Planning Tutorials
Developer

March 2023
Littleton, CO

- Demonstrations of RRT and A* path planning algorithms embedded in my blog.
- <https://duncanbritt.com/blog/path-finding-with-rrt/path-finding-rrt>
- <https://duncanbritt.com/blog/path-finding/path-finding>

School Assignment Tracker
Developer

July 2022
Littleton, CO

- To-do list application with query language interface. Written in C++. <https://bit.ly/3NHITVY>

Tic-Tac-Toe
Developer

September 2021
Littleton, CO

- Developed using the Ruby programming language. Game includes helper tool that recommends moves.
- <https://github.com/Duncan-Britt/Tic-Tac-Toe#readme>

Algorithms
Developer

Ongoing
Boulder, CO

- Implementations of the algorithms from my university course in Fall 2023.
- <https://github.com/Duncan-Britt/algorithms#readme>