

Cole Mutter

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EDUCATION

Colorado School of Mines, Golden, CO Expected Graduation 2027

- *BS Computer Science, With Emphasis in Robotics and Intelligent Systems*
- *GPA: 3.79*
- *Awards: Provost Award Recipient*
- *Relevant Coursework: Machine Learning, Software Engineering, Intro to Robotics, Data Structures, Algorithms*

Vandegrift High School, Austin, TX 2024

- *Awards: Distinguished With Honors*

TECHNICAL SKILLS

- *Computer Languages: Python, Java, JavaScript, C, C++, C#, HTML, CSS, XML*
- *Tools: Git, Jira, Bitbucket, Jenkins, Atlassian Suite, React, SQL*
- *Skills: Object Oriented Programming, Dynamic Programming, Data Structures, Algorithms, Machine Learning, Artificial Intelligence*

SOFTWARE EXPERIENCE

Voyant, Software Engineering Intern, Austin, TX Summer 2025

- Implemented a new Monte Carlo algorithm using mean-reversion and volatility inertia for more accurate and robust predictions
- Designed and implemented objective based investing algorithm for clients to efficiently plan investments for future goals. Utilized Modern Portfolio Theory, Stochastic methods, and Monte Carlo Simulations
- Collaborated with software engineers in an Agile work environment with daily stand-ups for consistent feedback.
- Utilized version control systems like Jira and Bitbucket (Atlassian Suite), effectively managing changes over time allowing for seamless collaboration among team members

SOFT SKILLS EXPERIENCE

Mathnasium, Instructor, Austin, TX October 2023 - May 2024

- Worked with a wide range of students and subjects ranging from advanced calculus students to elementary.
- Tracked student progress, frequently checking in with struggling students and identifying root causes of problems.
- Boosted student performance by providing individualized support and targeted feedback.

RELEVANT PROJECTS

- **BlasterHacks Hackathon 1st Place Winner: Renewable Energy App** Spring 2026
 - Built a python backend leveraging three different ML models to predict and optimize new renewable energy
 - React and Vite front end with ArcGIS embedding for clean visuals. Modal used for ML endpoints
 - View at renewably-1.onrender.com
- **HackCU Hackathon 1st Place Winner: Image to Lego set converter** Winter 2026
 - Python backend with use of several 3d modeling packages, gets models from photos through Meshy API
 - React front end for visualizations and instructions
 - Designed a greedy algorithm with custom heuristics to guarantee buildable Lego structures
- **Codenames Board Game Solver** Fall 2025
 - Python based application uses Google word2vec model to characterize words as vectors
 - Linear Algebra concepts to find the best point in 300d vector space, and then find its closest word
- **Connect 4 Engine** Winter 2024
 - Tree node structure implemented in C++ to search for future board states
 - Scores future board states to an adjustable move depth