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:* 3.88
- *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, Java Script, C, C++, C#, SQL, HTML, CSS, XML
- *Tools:* Git, Jira, Bitbucket, Jenkins, Atlassian Suite, React
- *Skills:* Object Oriented Programming, Dynamic Programing, 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

- Voyant Mean Reversion + Volatility Inertia Monte Carlo
  - Implemented using Java and XML
  - Allowed use of persisted data
  - Ensures Monte Carlo simulations abide by real-world market patterns
- Voyant Objective Based Investment Calculator
  - Implemented in Java
  - Utilized Monte Carlo and stochastic methods
- Connect 4 Engine
  - Implemented in C++
  - Uses tree node structure to search for future board states
  - Adjustable move depth, but is set to 9 due to system constraints
- CSCI 470 LLM Project: Cooking App
  - Utilizes ChatGPT OSS to make an external AI application
  - Generates recipes for you to cook based off leftover ingredients and budget