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| **Andrew Ebert**  **Technical Intern** | | | [andrew.ebert12@yahoo.com](mailto:andrew.ebert12@yahoo.com)  (720) 627-9163  [aebes5 (github.com)](https://github.com/aebes5)  [www.linkedin.com/in/andrew-e-ebert](http://www.linkedin.com/in/andrew-e-ebert) |
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**EDUCATION**

University of Colorado-Denver (Jan 2022 – May 2025)

**B.S. Applied Mathematics**

**B.A. Computer Science**

GPA: 3.73

**Upcoming Courses:** Data Science, Deep Learning, Machine Learning, Data Mining, Software Engineering

**RELEVANT EXPERIENCE**

**Student Researcher - University of Colorado-Denver, Physics (May 2023 – July 2024)**

* Automated the execution of 18 jobs on supercomputers using JSON, via [https://amosgateway.org](https://amosgateway.org/).
* Compiled code, primarily using Intel compilers and Intel MKL, to run high-performance computing jobs and optimize performance.
* Developed machine learning models (Random Forest and Binary Classification) using Python to classify four classes of electronic/atomic transitions.
* Analyzed and visualized complex datasets, collaborating with a team to create scripts using Matplotlib and Pandas.
* Participated in a group research presentation on high-performance computing at CU Denver’s 2023 Research and Creative Activities Symposium ([[RaCAS Presentation]](https://symposium.foragerone.com/2023-racas/presentations/56593)).

**Construction Laborer - Accell Construction (Aug 2021 - May 2023)**

* Applied a strong attention to detail and effective time management to efficiently complete tasks while ensuring the client’s specifications were met.
* Collaborated with a team, balancing individual tasks with collective goals of ensuring projects were completed on time.

**PROJECTS**

**Fitness Tracker Application**

* Led a team of three individuals on a class project to develop an Android application using Java.
* Managed version control using Git to ensure consistency across contributions.
* Facilitated communication between team members to ensure all project deadlines were met on time.

**Portfolio Optimization System**

* Utilized Python APIs to web scrape companies listed in the S&P 500.
* Formulated an optimization problem to maximize portfolio returns, ensuring the selection of at least 25 stocks, each contributing to no more than 20% of the total, to reduce volatility.
* Employed Gurobi to solve the problem with a maximum allowable variance of 7%.

**SKILLS & ABILITIES**

**Programming Languages:** Python, C++, C, R

**Data Visualization:** Matplotlib, Pandas

**Machine/Deep Learning:** Scikit-learn, PyTorch

**Optimization:** Numerical Methods, NumPy, SciPy, Pyomo

**Tools/Technologies:** Git, Linux/Unix, Intel MKL, SQL, MySQL

**Mathematics:** Calculus, Linear Algebra, Differential Equations, Probability and Statistics