

CASEY HACKETT

✉ caseyhackett01@gmail.com 🌐 chackett24.github.io

📍 128 West 4th St apt. 2L, Bethlehem, PA 📞 (919)599-0808

WORK EXPERIENCE

Volos - Systematic Options Trading Intern

June 2024 - Present

- Developed option-based strategies for clients using machine learning techniques to improve profitability.
- Extracted, interpreted, and leveraged data sets to uncover data-driven opportunities in existing trading strategies.
- Collaborated across teams to align business objectives and ensure the successful delivery of ongoing projects.
- Led efforts in developing software automation tools to streamline processes, improving production efficiency.

MIT Lincoln Labs - Optimization Intern

May 2023 - Aug. 2023

- Explored innovative methods for optimizing and automating superconducting qubit calibration processes.
- Analyzed technical documents to contribute to the development of cutting-edge tools, ensuring the project remained at the forefront of quantum computing.
- Demonstrated adaptability by adjusting project goals to meet evolving research objectives and priorities.

PROJECTS

CHRONOBERT for Pairs Trading

2025

- Collaborated on a research project aimed at enhancing pairs trading strategies using CHRONOBERT, a transformer-based model designed for time series forecasting without look-ahead bias.
- Investigated whether CHRONOBERT exhibits smaller deviations in out-of-sample performance compared to traditional and LLM-based forecasting methods.
- Evaluated CHRONOBERT's predictions within an automated trading strategy by analyzing resulting portfolio performance.

Catan Strategy via Data Mining

2025

- Applied data mining techniques to uncover key decision-making patterns in the board game Settlers of Catan, processing and analyzing large gameplay datasets.
- Developed data pipelines using IBM SPSS Modeler to clean, preprocess, and transform game data.
- Utilized classification algorithms (e.g., CHAID, Logistic Regression) to model player strategies and predict game outcomes.
- Generated meaningful insights, providing recommendations for early-game and mid-to-late game strategies.

EDUCATION

Lehigh University

Aug 2024 - Present

MS in Financial Engineering

Expected Graduation: May 2026

Relevant coursework: Risk Management, Portfolio Theory, Financial Data Analysis, Financial Optimization

University of Maryland, College Park

Aug 2020 - May 2024

Bachelor of Computer Science: Quantum Information

BACKGROUND

Skills:	Excel, Python (Pandas, NumPy), R, SQL, IBM SPSS, Technical Writing
Certificates:	IBM AI Foundations, Google Project Management
Security Clearance:	Secret clearance granted in 2023

AWARDS

North American Conference on Trapped Ions Poster Board Achievement

Aug. 2022

MIT Lincoln Labs Intern Innovation Challenge Finalist

July 2023

Lehigh University Director's Scholarship

March 2024