

EDUCATION

New York University	New York City
Bachelors in Mathematics and Computer Science	Fall 2022 –December 2024
– Graduate Coursework: Game Theory, Statistics, Topology	
University of Delaware	Newark, DE
Bachelors in Mathematics and Computer Science (GPA 3.99/4.0)	Fall 2021–Spring 2022
– Graduate Coursework: Machine Learning, Combinatorics, Spectral Graph Theory, Algebra	

EXPERIENCE

Citadel Securities	Chicago, IL
Software Engineer Intern	Summer 2023, Summer 2024
– Research Platform Team. Optimizing Pytorch and GPUs for Citadel’s HPC cluster.	
– Low Latency Equities + Futures Team. Wrote efficient C++ for the high frequency trading platform. Improved reliability of a code path where a significant percent of the company’s revenue and US equity order flow passes. Extensively tested through GTest, the Behave framework, and other internal stress testing tools.	
NYU Center of Data Science	New York City
Researcher	Fall 2023 - Present
– Trying to describe and assess the impact of random variation in initialization on the training of language models.	
Snowflake	San Mateo, CA
Software Engineer Intern	Winter 2024
– SQL Compiler Platform Team. Worked to improve compiler performance on a broad class of SQL queries by creating an additional framework for a special class of compile time rewrite rules. Measurable improvement on approximately 20% of daily queries. Primary technologies used include Java and Snowflake	
Amazon	Boston, MA
Software Development Engineer Intern	Summer 2022
– Worked on the Alexa team. Programatically created automated testing workflows for machine learning models using internal REST APIs and the AWS Cloud Development Kit. Used Python, Node, Bash, and Linux for backend server and automation work. Fully end to end automated with the internal CI/CD.	

TEACHING

Teaching Assistant at New York University	Fall 2023
Algorithms (CS-UY 2413). Grade and create homework and exams. Held office hours.	
Teaching Assistant at University of Delaware	Spring 2022
Discrete Math (MATH 210). Graded homework and exams. Led office hours and weekly recitation.	
Algorithms Instructor at AlphaStar	Summer 2021
Taught algorithms and C++/Java programming to a class of over 30	

AWARDS AND HONORS

• Neo Scholar Finalist	2023
• Top 310 Putnam	2022
• MIT Battlecode Finalist	2022
• USA Computing Olympiad - Platinum Level	2021
• Apple Swift Student Challenge Winner and WWDC Scholar	2021
• 2x American Invitational Mathematics Exam Qualifier	2020–2021
• AAU Junior Olympics Qualifier 100m	2019