

RODERICK HUANG

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EDUCATION

Massachusetts Institute of Technology

Double S.B. in Mathematics and Computer Science, MEng in EECS | GPA: 5.0/5.0

Coursework: Algorithms Design/Analysis, Advances in Computer Vision, Probability, Statistics, Software Construction, Reinforcement Learning(G), Computer Vision(G), Inference/Information(G), Deep Learning(G), Algorithmic Game Theory (G)

Cambridge, MA

Sep 2021 - May 2025

EXPERIENCE

Chicago Trading Company | Chicago, IL

Quantitative Trading Analyst Intern

Jun 2024 - Aug 2024

- Completed rigorous education program covering options theory and participated in options mock trading
- Researched and analyzed trading strategies for the Systematic E-trading team to create live financial market data

Amazon | Seattle, WA

Software Developer Engineer Intern

Jun 2023 - Aug 2023

- Worked under the Business Data Technologies team in backend development to construct datasets for Amazon's internal tools by applying topics in algorithms, graph theory, and database management
- Presented data analysis opportunities for engineers to improve performance optimization for internal tools

MIT EECS | Cambridge, MA

AeroAstro Researcher

Sep 2022 - Present

- Continuation of undergraduate research to MEng thesis in Markowitz Portfolio Theory (MPT)
- Leveraging data science techniques to determine technology investments for NASA earth observation missions
- Strategizing initiatives to automate dynamic portfolio allocation for 10-20 year-long technology projects by utilizing optimization techniques within reinforcement learning frameworks.

Teaching Assistant

- Leading recitation lectures in Math for Computer Science and organizing course logistics with professors
- Assisted Software Construction class of more than 500 students in debugging their lab projects

Verizon | San Jose, CA

Product Management Intern

Jun 2022 - Aug 2022

- Developed data analysis and data visualization for Verizon's Bluejeans video conferencing tool to outline proposals for advancing Bluetooth automation, resulting in 50%+ user retention rate improvement
- Conducted competitive analysis to align engineer and product manager needs to support the business model

ACTIVITIES

Traders@MIT

Co-President

Sep 2022 - Present

- Organizing events and seminars in preparation for MIT's annual national quantitative trading competition
- Leading educational series about necessary soft and technical skills for careers in quantitative finance

MIT Varsity Swimming & Diving

Captain

Sep 2021 - Present

- Conference record holder in 200 yard breaststroke, 2-time NCAA A-finalist
- NCAA Elite 90 award recipient as a sophomore for pinnacle achievements in both academia and athletics

PROJECTS

Options Market Making Broker Simulator

Jul 2024 - Aug 2024

- Designed and simulated option market quotes and trades on the S&P 500 futures while applying position-fitting algorithms and minimum edge requirements
- Heavily involved various spread types including butterflies, ratio spreads, and rolls to test speed and accuracy.

CSAIL "Invisible" Ink Computer Vision Research

Sep 2023 - May 2024

- Assisted the development of hybrid paper documents for interactive digital media by leveraging AR techniques and computer vision models, resulting in 80%+ accuracy in detecting "invisible" QR codes
- Published peer-reviewed paper and intending to deliver products in the startup space

MIT Poker Bots Competition

Jan 2023 - Feb 2023

- Competed against 100 other teams to program an autonomous pokerbot to solve River of Blood Hold'em, a poker variant, by utilizing concepts from game theory, statistics, and psychology
- Won Citadel's Best Run Bets award for most optimized betting amounts in later stages of the games

SKILLS & AWARDS

Technical Skills

- **Tools and Languages:** Java [Android Studio], Python [PyTorch/TensorFlow, pandas], Matlab
- **Web Development:** HTML, CSS, JavaScript [Node.js/React/TypeScript], Python [Flask], MongoDB

Awards: 4-time AIME qualifier (Score: 9/15), 4-time USA Swimming Scholastic, MIT Class Student-Athlete Award

Interests: Cooking, traveling, IM basketball, video games (Halo, GTA V), poker