RODERICK HUANG

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EDUCATION

Massachusetts Institute of Technology — **Cambridge, MA**
Double S.B. in Mathematics and Computer Science, MEng in EECS | GPA: 5.0/5.0 — Sep 2021 - May 2025
Coursework: Algorithms Design/Analysis, Deep Learning, Advances in Computer Vision, Probability, Statistics, Econometrics, Software Construction, Reinforcement Learning(G), Computer Vision(G), Inference/Information(G), Deep Learning(G), Automata Theory(G)

EXPERIENCE

Chicago Trading Company | Chicago, IL
Quantitative Trading Analyst Intern — Jun 2024 - Present
- 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

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

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

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

CSAIL "Invisible" Ink Computer Vision Research — Sep 2023 - Present
- 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
- Intending to present at leading tech conferences and deliver products in the startup space

Computer Vision Research - Visually Indicated Sounds — Feb 2023 - May 2023
- Implemented a recurrent CNN-LSTM model to predict volume in silent video scenes through visually indicated sounds by capturing the state and motion of video frames
- Advanced the field of sound perception in the generation of sounds for silent films and movie sound effects

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, casual table tennis, video games (Minecraft, GTA V), poker