Shauna Kwag
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E D U C A T I O N

Massachusetts Institute of Technology (MIT) | Cambridge, MA
MS in Operations Research (Advised by Prof. Andrew Lo)   *Expected May 2026*
- ▪ ***Research topic:*** Game Theory, Optimization, Behavioral Economics

B.S. in Mathematics (GPA: 5.0/5.0), *Phi Beta Kappa*   *September 2020 - May 2024*
- ▪ ***Relevant Coursework:*** Probability and Random Variables, Software Systems for Data Science, Machine Motivated Human Vision, Math Topics for Finance, Statistical Thinking and Data Analysis, Optimization, Information Theory

E X P E R I E N C E

Laboratory for Financial Engineering | Cambridge, MA   *September 2024 - Present*
Graduate Research Assistant
- ▪ Apply Bayesian Decision Analysis to assess trade-offs, maximizing patient-centric value in clinical decision-making

DGV Solutions | Minnetonka, MN   *June 2024- August 2024*
Quantitative Research Intern
- ▪ Optimized portfolio allocation by holding period and day of the week using Python, maximizing risk-adjusted returns
- ▪ Interpolated option prices and backtested strategies with Pandas, creating and sorting large Excel datasets for analysis
- ▪ Managed the portfolio for a paper trade competition using Excel and devised trading strategy that placed 2nd overall

MIT IBM Watson AI Lab | Cambridge, MA   *January 2024 – May 2024*
Research Assistant
- ▪ Streamlined probabilistic programming tutorials, targeting key issues to enhance usability for a diverse range of users
- ▪ Quantified and interpreted uncertainty in AI by problem-solving and debugging in probabilistic programming

A W A R D S

Google Fellow Public Policy (2024)
SERC Scholar Schwarzman College of Computing (2024)
ISEF 3rd grand award in Mathematics (2019)
USA Mathematical Talent Search Silver (2019)
1st place at **MIT Ilona Karmel Writing Competition** in Autobiography Genre (2022)
Valedictorian Blair Academy (2020)

P R O J E C T S

ESG Investing
- ▪ Utilized the Bloomberg Terminal to analyze performance of high ESG-rated companies, evaluating for paradigm shifts
- ▪ Informed strategic investments through keyword trend analysis, optimizing decision-making and managing risk factors

Human vs. Machine ASL Classification
- ▪ Collaborated with a cross-functional team to evaluate the efficacy of Video Remote Interpreting of ASL in clinics
- ▪ Revealed humans surpass machines by 51%-59% in blurred ASL recognition, guiding healthcare AI strategies

L E A D E R S H I P

Girls Angle | Cambridge, MA   *November 2022 – Present*
Mentor
- ▪ Developed engaging math problems to inspire and mentor young girls in STEM, fostering problem-solving skills

MIT Physics II | Cambridge, MA   *February 2023 - May 2023*
Undergraduate Teaching Assistant (TA)
- ▪ Hosted group problem solving / learning sessions for 10 students 3x a week and prepared weekly learning agendas
- ▪ Graded tests and homework, assisted in in-class experiments, and answered questions in class for 100+ students

Alpha Phi | Cambridge, MA   *January 2022 – February 2023*
Director of Diversity
- ▪ Led the design and implementation of inclusive recruitment strategies to improve diversity of chapter for 90+ members

Special Olympics | Newton, MA   *September 2021 – January 2022*
Soccer Coach
- ▪ Led weekly soccer practices to a group of children between the age of 5-17, focusing on safety and accessibility

A D D I T I O N A L   I N F O R M A T I O N

Activities: EMT, Residential Adviser, Soccer | **Skills:** Python, SQL, Bloomberg Terminal, Korean, Chinese | **SAT**: 1540