

Ming Qi

mingqi@seas.upenn.edu | www.linkedin.com/in/ming-qi/ | 949-568-7042 | Philadelphia, PA

EDUCATION

University of Pennsylvania (Vagelos Integrated Program in Energy Research)

GPA: 4.0

College of Engineering and Applied Science

May 2027

- Candidate for Bachelor of Science in Engineering in Computer and Information Science
- Relevant courses: Data Structures & Algorithms, Big Data Analytics, Discrete Math, Engineering Probability

College of Arts and Sciences

- Candidate for Bachelor of Arts in Physics and Astronomy

University High School

- GPA: 4.55 SAT 1580 (R/W: 780, M: 800)

Irvine, CA

June 2023

SKILLS

- Python, Java, SQL, OOP, DSA, C, Pytorch, JavaScript, Pandas, OCaml, Streamlit, Beautiful Soup, Git
- Fluent Mandarin

WORK AND RESEARCH EXPERIENCE

Chaudhari Group | Researcher, Philadelphia, PA

Feb 2024 - Present

- Constructed Deep Reference Prior in Pytorch, implementing algorithm outlined in Professor Chaudhari's Paper
- Deep Reference Prior architecture maximizes change in entropy of weights after seeing the average data, allowing model to train on very small amounts of labeled data
- Model achieved an 82% accuracy on just 3 labeled images per category for Semi-Supervised Learning MNIST

Airline Delay Data Project | Student

Oct 2024 - Dec 2024

- Merged flight and county weather datasets using Pandas to analyze correlation between weather and delays
- Cleaned dataset, one-hot encoded and standardized relevant columns to preprocess data for modeling.
- Trained neural network to predict delay, customized loss to maximize precision on imbalanced data

Reyes Holdings | Software Engineering Intern, Rosemont, IL

May 2024 - August 2024

- Developed UI using Streamlit Python library to visualize optimal cooler displays output by team's model
- Built internal app to allow delivery drivers to use company's Route Optimization Model, reducing drive time
- Engineered pipeline using SQL piping parameters from app to Snowflake database to Route Optimization Model
- Communicated development and needs with Data Science team, Executives, and Delivery Driver stakeholders

Stony Brook University | Researcher, Stony Brook, NY

June 2022 - Dec 2022

- Built a computational model of the growth of dendrites in Sodium Ion Batteries in C using Lattice-Boltzmann methods with SBU Professor Dilip Gersappe
- Invited to present findings to 20 professors at the Materials Research Society Fall 2022 Conference in Boston

EXTRACURRICULARS

Penn Climate Ventures | Consultant

Sept 2023 - Present

- Advised Checkmate Capital hedge fund on acquisitions identifying 10 inefficiently run waste management plants
- Predicted trends in ESG initiatives offered by the top 8 Home-Decor Companies for shadow client
- Quantifying startup climate impact for Fall Line Capital

Wharton Asia Exchange Club | Quantative Global Macro Team

Sept 2023 - Present

- Pitched one-year short position on Occidental Petroleum to WAX Stock Pitch Competition
- Created DCF for OXY using company 10-Ks

AWARDS

Olympiads

- United States of America Physics Olympiad (USAPHO) Semifinalist, Top 200
- American Invitational Mathematics Exam (Score: 8)

2022

2020 - 2023