Cynthia Chen

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Education

Harvard University

Cambridge, MA | Expected May 2024

M.S. Computer Science & B.A. Computer Science and Statistics | GPA: 3.9/4.0

- Coursework: Topics in Machine Learning: Interpretability & Explainability, Distributed Computing, Data Structures and Algorithms, Systems Programming & Machine Organization, Operating Systems, Machine Learning, Unsupervised Learning, Algorithms & Limitations, Information Theory, Probability, Statistical Inference, Vector Calculus and Linear Algebra, Market Design, Code Data & Art
- Leadership & Activities: Women in Computer Science (Mentorships Director, Sponsorships Director), Harvard Undergraduate Capital Partners, Harvard Women's Club Volleyball, Peer Advising Fellow

The Harker School San Jose, CA | June 2020

GPA: 4.0/4.0. Neural Networks, Compilers, Expert Systems, Multivariate Calculus, Differential Equations.

Work Experience

Harvard Insight and Interaction Lab | Undergraduate Research Assistant

Cambridge, MA | Current

• Visualizing the attention mechanism in transformer models like BERT and GPT. Supervised by Martin Wattenberg and Fernanda Viégas.

IMC | Quantitative Trading Intern

Chicago, IL | June 2022 - August 2022

• Developed a time-series prediction model to predict short-term movements and trade ES/NQ futures.

LinkedIn | Software Engineering Intern

Sunnyvale, CA | May 2021 - August 2021

- Worked on the AI and Data Infrastructure Team. Developed an end-to-end integration to run Tensorflow Extended (TFX) pipelines on Apache Beam using SparkRunner.
- Tested integration for improvements in scalability and performance of LinkedIn's ML production pipelines.

MIT CSAIL | Research Assistant

Cambridge, MA | Feb 2021 - June 2021

• Investigated computer vision model interpretability by visualizing interactions between activations during model training. Supervised by David Bau and Antonio Torralba.

Harvard School of Public Health | Research Intern

Boston, MA | June 2018 - Aug 2019

- Conducted a two-year project at the Shirley Liu Lab, developing a computational framework to interpret the sequence patterns in deep learning models. Identified 65 protein sequence motifs for cancer drug synthesis.
- Co-authored paper in *Molecular Cell*. Presented research at 2019 & 2020 AACR conferences.

Activities & Projects

Statistics 110, Harvard University | Teaching Fellow

Fall 2022

Organized and led weekly sections and office hours to teach students probability and statistics.

Harvard Undergraduate Capital Partners | Managing Director

2020 - 2022

Led team of 35 students to source the top Harvard-affiliated startups for VC clients.

Harvard Builders Incubation Program | Co-Director

Summer 2021

Organized accelerator for Harvard tech startups, providing funding and mentorship for 22 teams.

Opportunity X | Founder

2016 - 2020

Founded a nonprofit that created science research programs at 27 middle schools for 1000+ low-income students.

Skills

Languages: Python • C/C++ • Java • SQL • R • JavaScript • HTML/CSS • MATLAB

Tools: TensorFlow • PyTorch • scikit-learn • numpy • pandas • Flask • D3 • React∫S • p5.js • Jupyter • Linux • Git

Honors

2020 Stockholm International Youth Science Seminar Award

2019 Research Science Institute (RSI) Scholar

2020 Regeneron Science Talent Search Top 40 Finalist

2018 2-Time USA Junior Math Olympiad Qualifier

2019 Davidson Fellows Laureate, \$50K Award Top 4 in Nation

2017 USA Computing Olympiad Gold Division