

Helen Yang

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EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

BS Candidate in Computer Science and Engineering, Cognitive Science - GPA: 5.0/5.0

Expected June 2024

- **Relevant Coursework:** Elements of Software Construction (6.031)*, Advanced Natural Language Processing (6.806)*, Design and Analysis of Algorithms (6.046), Machine Learning (6.036), Intro to Algorithms (6.006), Web Development (6.148), Discrete Math (6.042), Fundamentals of Programming (6.009); * = Fall 2021
- **Teaching/Lab Assistant:** 6.036 (Machine Learning, Fall 2021)
- **Leadership/Extracurriculars:** TechX/HackMIT/xFair (Executive Board, xFair Co-director), Society of Women Engineers (Outreach Chair), Pi Beta Phi (Committee Member), MIT Chamber Music Society

TECHNICAL SKILLS

Python, Java, HTML/CSS, JavaScript (React, Node.js), Machine Learning (PyTorch, keras, tensorflow, spacy, nltk, DeepSpeed), MongoDB, SQL, Matlab, Django, Docker, Flask, Kubernetes, GCP, Azure

EXPERIENCE

Software Engineering Intern

June 2021 – Present

Infosys

Quincy, MA

- Global InStep intern – developing several named-entity-recognition models for effective extraction of meaningful text from official documents such as resumes. Using Python, tensorflow, DeepSpeed, Azure, keras.

Machine Learning Engineer Intern

May 2021 – Present

Department of Defense

Wright-Patterson Air Force Base, OH

- Developing software for Bayesian goal inference technology and coding NLP models to process and categorize voices to predict agent actions. Integrating object detection/video-feed analysis into voice models and evaluating different contextual-embedding models. Using Python, Docker, tensorflow.

Software Engineering Intern

Jan 2021 – May 2021

Colgate-Palmolive

Piscataway, NJ

- Developed a full-stack web application interface for machine learning researchers to record, export, and analyze their runs. Created an API for machine learning models to be integrated into the predictive chemistry website.
- Used SDLC, Kubernetes, Docker, GCP, Python, JavaScript, React, PostgreSQL, Node.js, and Django

Machine Learning Research Intern

Aug 2020 – May 2021

Massachusetts Institute of Technology

Cambridge, MA

- Designed a convolutional neural network to model image processing and dendritic integration in the primary visual cortex of the mammalian brain. Model achieved over 95-percent accuracy. Coding done in Python (PyTorch, NumPy, Matplotlib).

PROJECTS

helen.me | <https://helen.me/>

- Designed and coded website from scratch, showcasing all projects in further detail. Used JavaScript, React, HTML/CSS.

[icecream.brulee](https://icecream-brulee.herokuapp.com/) | <https://icecream-brulee.herokuapp.com/>

- Coded a full-stack gaming website based on a popular party game in TypeScript, React, Node.js, MongoDB.

[an ocean in crisis](https://anoceanincrisis.com/) | <https://anoceanincrisis.com/>

- Won a National Ocean Awareness Contest award for creating a website blog to raise awareness about the numerous ecological catastrophes facing the ocean.

AWARDS

MIT Emerson Scholar; USABO National Finalist (6th highest score out of 10,000 in the USA); Tests of Engineering Aptitude, Mathematics, and Science National Finals; AP Scholar with Distinction; Fencing National Championships; National Orchestra Director's Award; Scholastic Art and Writing Gold Key