

Claire Wang

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Education

Massachusetts Institute of Technology (MIT)

Cambridge, MA · *Expected grad: May 2027*

Candidate for bachelor's degree (BA) in Electrical Engineering Computer Science + Neuroscience (double major) and minor in Planning/Public Policy. Involved with HackMIT, Code for Good (pro-bono tech consulting & development), and Harvard Policy Debate. Outside: involved with NucleateDojo and Contrary.

Phillips Academy Andover / Stanford OHS -

Los Angeles, CA & Andover, MA · 2020 - 2023

Co-president of CS, Quiz Bowl, Biology, and SciOly Clubs; Part of Makerspace Guides, Peer Listeners, and Digital Editor of *The Philliptian*. *Relevant coursework:* Linear Algebra, Formal Language Theory, Data Structures & Algorithms, Data Visualization, Ethics of Technology, AP Physics C, AP Stats, Haskell, Robotics. *Clubs:* Lead Hack Club & Neuroscience Club.

Skills

Technical Skills: Web Development (React, Next, etc.), Graphic Design (Figma, Adobe Illustrator), C++ (backend & algorithms), Python, Machine Learning & AI, Haskell, Java, Fusion360/CAD, RF electronics/signal processing, 3D Fabrication, data visualization (d3.js, three.js, data journalism), data analysis, academic research, GitHub/project management, MRI.

Other skills: Teaching, Debate, Acting (theater/professional film), Writing (scientific, business, creative).

Languages: English (native) & Mandarin (fluent).

Academic/Research Experience

Jasanoff Lab @ MIT McGovern Institute / MIT CSAIL

Cambridge, MA · 2023-Present

Project: *Designing MRI Probeheads for in-vivo Imaging*, building complex RF phase-array circuits for rats & marmosets, under Kevin Chung. Work extensively with 3D fabrication, NMR spectroscopy, MRI imaging, circuit design/operation, and general signal processing.

Boyden Lab @ MIT McGovern Institute

Cambridge, MA · 2023-Present

Project: *Towards whole Nervous System Emulation*, working on reverse-engineering a *C. elegans* nervous system through state-of-the-art microscopy imaging, mapping with AI/ML transformer models for all 302 neurons, etc., for "brain uploading," under Davy Deng. Overall project/lab is working in conjunction with 4 other labs.

Alignment Research Engineer Accelerator (ARENA)

London, UK · Jan 2024

Curriculum to rapidly upskill selected participants (2.7% acceptance rate) to become ML engineers and potential alignment researchers. Covered in-depth units on transformers, mech interp, RL, CNNs, ResNets, and implementations of optimizations and mathematical techniques. www.arena.education/

Research Science Institute Researcher @ Visual Attention Lab

Boston, MA · Summer 2022, 2023

Paper title: *Correlation Between Spatial and Temporal Massive Memory* at Harvard Medical School under Prof. Jeremy Wolfe for the RSI program. Developed a novel web app for human experimentation & data collection; studied the automaticity of massive memory. Was also a counselor at RSI in 2023 while working on Reinforcement Learning research under R. Dangovski & M. Tomov (hiatus).

UCLA Lab of Neuromodulation and Neuroimaging

Los Angeles, CA · 2018-2022

Intern @ UCLA LONN Lab in the Semel Institute for Neuroscience, researched human fear and memory using BCI & VR technology. Designed VR environments, extensive computer vision data analysis, and software for human experimentation/brain segmentation.

MIT PRIMES & CSAIL

Cambridge, MA · 2020-2022

Paper title: *Parallel Computing for Bi-core Decomposition of Bipartite Graphs* under Prof. Julian Shun & Jessica Shi. Paper won 2nd at MSEF, 1st Global at S.T. Yau, presented at the AMS-PME JMM22 Conference & **published** at the ACM-SIAM SODA23 Conference. 2nd year: Broad Institute computational biology work on single-cell RNA sequencing analysis (ended early due to RSI).

Additional Jobs/Work

Contrary Capital: Venture Partner

2023-Present

Contrary identifies and invests in the world's top talent. The firm has helped create more than \$10 billion in value through company investments.

Hack Club: Intern & Community Team

2018-Present

- Lead producer of a web-based game exploring function composition through love & skiing, created by Hack Club students. Public beta launched May 2023 and reached 2nd on HackerNews. sinerider.com
- Helped create/hosted AMA program—reached out and hosted/helped AMAs countless speakers like Elon Musk, Nicky Case, Sal Khan
- Also developed the ZephyrNet and organized the Hacker Zephyr: cross-country hackathon, virtual internet server, etc. zephyr.hackclub.com hackclub.com

AngelHacks: Director

2019-2023

Founded & Directed AngelHacks for all 3 iterations: 1st in LA @ Snapchat HQ, 2nd online w/ >1k attendees, and 3rd as a game jam in Boston. Raised ~\$30k in financial donations & worked with >60 judges and mentors.

angelhacks.org

DeepAI Intern

2019-2021

Worked on AI/ML content & CNN meta-learning testing for Zendo, a computer vision model for auto-labeling. deepai.org

Nujjet (prev. TARDIS)

2020-2022

A non-invasive BCI (EEG + tDCS) based startup to build better habits through nudges & predictive AI. Won 1st at the Conrad Challenge in 2021 & was offered funding by GATSVI Startups. (hiatus)

Awards

- Research Science Institute (2022, Counselor 2023)
- Davidson Institute Fellowship Scholar (2023)
- S. T. Yau Global Science 1st & CS Gold (Dec 2021)
- Global Pete Conrad Scholar, Cyber Track (May 2021)
- MSO World Speed Reading Champion (Aug 2020)
- SPARC & WARP Camper (2021, 2023)
- VexAI Robotics Worlds THINK Award (May 2021)
- ACM-SIAM Soda APoCS Conference & JMM AMS-PME Conference (2022, 2023)
- Quiz Bowl: MIT QB 1st, Top 20 Nats (2021, 2022)
- USA Biology Olympiad Semifinalist (2021, 2022)
- USA Memory Championship, 3rd place; organized Jul 2018, 2019
- NSPA Digital Journalism Award for *The Philliptian*'s SOTA (2022)
- STS Top 300 Scholar (Jan 2023)
- Elliptic Curves Math Research under Nahid Walji, published on DeepAI (2018-19)