Ivy Yip

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Education

Massachusetts Institute of Technology, Cambridge, MA — May 2028
Candidate for BS in Computer Science and BS in Math — GPA: N/A
Relevant Coursework: Intro to ML (6.3900), Intro to Algorithms (6.1210), Fundamentals of Programming (6.1010), Discrete Math (6.1200), Web Lab: A Web Programming Class and Competition (6.9620)

Westlake High School, Austin, TX — May 2024
Class Rank: 6 out of 693 students; GPA: 106.024/100

Experience

MIT Election Lab, Cambridge, MA — January 2025 – Present
Undergraduate Researcher
- Developed web scrapers to extract and process legislative bill information

Yale Summer Program in Astrophysics, New Haven, CN — July 2023 – August 2023
Summer Program Participant (1 of 36 from 800+ applicants)
- Observed an extragalactic supernova at Yale's Leitner Observatory
- Analyzed and modeled the photometric light curves of the supernova using software and Python packages
- Authored research paper in collaboration with team members

Texas State University, San Marcos, TX — August 2023 – August 2024
Student Researcher
- Self-initiated independent research project to model social media's networking effect by analyzing news' propagation under Professor Chul-Ho Lee
- Parse data for analysis and apply algorithms to discover users with greatest impact

FundingReach Limited, Hong Kong (Remote) — June 2021 – August 2021
Summer Intern
- Created **python** scripts using the **Scrapy** framework to collect and extract data from online sources on sanction lists and politically exposed people

Projects & Extracurriculars

Picventure (*Web Lab: A Web Programming Class and Competition 6.9620*) [code] — January 2025-Februrary 2025
- Developed a picture-sharing website using **AWS cloud storage** and the **MERN** stack, enabling users to complete daily challenges, form friend groups, and unlock achievements
- Implemented **cron jobs** to automate real-time backend updates

MIT Motorsports, Cambridge, MA — September 2024 – Present
Software Telemetry Team Member
- Developed telemetry website using **Next.js** and **Typescript**, enabling real-time data visualization
- Integrated 3D models into web pages and implemented authentication APIs to secure user access

FIRST Robotics Competition (FRC), Team 2468 Team Lead / Member — February 2022 – May 2024
World Championship Qualifier x3 / World Championship Division Finalist / State Championship Division Winner / District Events Winner x4 / 1 of 6 Chairman's Finalists at World Championship
- Headed the Intelligence & Strategy team (15+ members)
- Designed and managed the development of app for data collection, mining and analysis to make the smartest strategic decision for the team
- Collected performance data on 100+ robots in 320+ matches each season

Skills & Interests

Awards: USA Computing Olympiad (USACO) Silver Competitor
Programming Language/Framework: Python, Java, Javascript/Typescript, React.js, HTML/CSS, SQL, MongoDB, AWS (S3), Git/Github
Language: English (fluent), Chinese (Mandarin & Cantonese) (fluent)