Kevin Liu

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EDUCATION

Albany High School Albany, CA Unweighted GPA: 3.93/4.0

Courses 2025-26: AP Literature & Comp., AP Chemistry, AP Computer Science P, AP Statistics, AP Comparative Government, U.S. Government & Economy, Graphic Design

Courses 2024-25: AP Language & Comp., AP Physics C: Mechanics, AP Calculus AB, US History, AP Computer Science A, Electronics Lab

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EXPERIENCE

Summer Science Program International – SSP(SSPI)
Research Intern

Guelph, Ontario
July 2025 – August 2025

- Selected as one of 36 among 3700+ applicants for a 5 week intensive research program at the university of Guelph

- Conducting microbiology research, along with two lab mates, on spectinomycin resistance in gram-negative V. natriegens bacteria

- Focusing on antibiotic resistance and gene-directed evolution.

- Utilizing wet lab techniques relating to bacterial culture & growth, bioinformatics, and genetic sequencing.

Stock Top 100 – Investopedia Simulator

Virtual
June 2022 – Present

- Ranked 96th place out of over 2.5 million players on the internet's largest stock simulator: the Investopedia Stock Trading Simulator.

- experienced in short-selling, option trading, and crypto.

Harvard Ventures TECH & SalesPatriot – HUVTSP *Intern*
(Harvard John A. Paulson School of Engineering and Applied Sciences)

Cambridge, MA
June 2025 – July 2025

- <undisclosed>

United Nations Young Scholar & Ambassador – GYEL
Research Intern (United Nations Initiative)

New York City, NY (Remote)
December 2024 – May 2025

- Working on technological solutions to the UN's SDG 14: Life Below Water • <undisclosed>

Aspiring Scholars Directed Research Program – ASDRP
Research Intern (Secondary Student Training Program)

Fremont, CA (Remote)
August 2024 – June 2025

- Dr. Laurienzo Lab: Used Simultaneous Localization and Mapping(SLAM) to examine iterative development of traversing functions that optimized navigation for an autonomous virtual car to complete obstacle courses around a virtually simulated track efficiently • Developed fundamental understanding of deep learning (Feedforward neural networks, Convolutional neural networks, SLAM techniques), 1D vs. 2D CNNs. Implemented deep learning models with Tensorflow and Ros2. • <undisclosed>

- Dr. McMahan Lab: Employed Autonomous Drone(Ros2) and computer vision technology for invasive plant detection and removal • <undisclosed>

CrowdMath – MIT PRIMES & AoPS *Research*

Remote
August 2024 – February 2025

- Contributing to the 2019 Graph Coloring and 2024 Goldbach Conjecture projects • Full details and disclosure on AoPS

MIT Beaver Works Summer Institute – BWSI *Intern*   Cambridge, MA
                                                                          July 2024 – August 2024

- Conducted autonomous vehicle and computer vision engineering research on the design and operation of underwater vehicles(AUVs) with Dr. Mohammed Saad Ibn Seddik ▪ Integrated Ros2 technologies, Fusion 360, QGroundControl, and computer vision to optimize the operation of six propeller vehicles for electronic warfare and detection ▪ Conducted robotics research and literature reviews on autonomy policies and applications of sonar communication and computer vision.

Climate Positive Student Network – CPSN *Cofounder and*   Albany, CA
Newspaper Editor-in-Chief   January 2022 – July 2024

- Conduct macroeconomic research and interviews with mayors of Berkeley, Oakland, San Francisco, and other climate leaders in order to determine best courses of action in climate education for Bay Area youth ▪ Develop an online website, growth channels, and publication landscape for weekly climate newsletters and updates ▪ Grew CPSN, initially a school club, into a Bay Area wide organization spanning over 17 public, charter, and private schools. Partnered with organizations like Common Vision to facilitate events and expanded the reach and effectiveness of our program.

Young People's Symphony Orchestra – YPSO *First Violinist*   Berkeley, CA
(Youth Orchestra)   August 2023 – July 2024

- YPSO's Assistant principal first violinist during the 2023-24 Japan tour year ▪ Performed locally, regionally(BAYOF), and internationally(Sakai and Tokyo) with the orchestra.

CRISPR Cas9 Research – Innovative Genomics Institute (IGI)   Berkeley, CA
Intern   June 2022 – July 2023

- Mentored by, and worked under, undergrad. from Dr. Savage & Dr. Doudna labs for genomics coursework and wet-lab research at UC Berkeley IGI, focusing on practical skills in Cell Biology and industry insights ▪ Gained hands-on experience with yeast and bacterial culture, learning to implement CRISPR technology ▪ <undisclosed>

Amazon AHEAD Scholar – Amazon Web Services (AWS)   Palo Alto, CA
Intern   December 2023 – June 2024

- Engaged in a comprehensive Game Development course at Amazon Web Services, focusing on practical skills and industry insights ▪ Gained hands-on experience with GDevelop platform, learning to design, develop, and implement interactive game elements and mechanics ▪ Applied knowledge of game design principles to create engaging functional game prototypes using Python.

Awesome Math Summer Program – AwesomeMath   Remote
Student   July 2022 – August 2023

- Took classes Algebra 2.5 Level 2 and Math Counts and Proofs Level 2.

EXTRACURRICULAR ACTIVITIES – Awards/Achievements
MIT BWSI Pioneering Engineers Award 2024 – National
American Invitational Mathematics Examination (AIME) 2020-21, 2022-23, 2023-24

- Qualified for the AIME in the years '20, '22, and '23. Scored a high of 6 points in the 2022 AIME ▪ Earned AMC 10 Honor Roll in

20' and 22'

USA Computing Olympiad (USACO) 2022

- A competing member of the USACO Silver division

Academic Talent Development Program(ATDP) Pathway Scholar 2022

- One of 30 recipients for a full scholarship out of 1400+ ADTP students. Granted from the Lawrence Berkeley National Lab.

Amazon Web Services(AWS) AHEAD Scholar 2023
Presidential Service Award Gold 2021

SKILLS / INTERESTS : Skills – C++, Python, Java, Fusion360, CAD, GDevelop, Wetlab(BSL-2) **Interests –** Computer Science, Genomics, Generative AI, Machine Learning, Autonomy, Writing, Quant. Investing