

Nathan Dai

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EDUCATION

University of California, Berkeley

August 2024 – May 2028

Bachelor of Science in Electrical Engineering and Computer Science (EECS)

Relevant Coursework:

- CS 61A: The Structure and Interpretation of Computer Programs
- EECS 16A: Designing Information Devices and Systems I

Canyon Crest Academy

August 2020 – June 2024

High School Diploma

GPA (Unweighted): 4.0

Relevant Courses:

- Computer Science A, Physics 1/2/C: Mechanics and E&M, Statistics, Calculus AB/BC/Multivariable, Linear Algebra

SKILLS

- **Programming:** Python, Java, C++, JavaScript
- **Data Analysis:** Pandas, Excel, Matplotlib
- **Management:** Project Management, Time Management, Cost Management

RELEVANT EXPERIENCES

Machine Learning and Data Science Club

August 2021 – May 2024

Co-founder and Vice President

- Developed an AI-powered climate change education platform, *EcoGuide*, to empower greener lifestyles
2nd Place (2/68 global teams)
- Engineered an LLM-based epitope classifier to accelerate the identification process for vaccine candidates
(Bio ML Hackathon, 20/500+ accepted project proposals)
- Built a security system using Google Gemini and Nest to send detailed threat descriptions via text message
- Led and organized a free ML bootcamp, providing hands-on instruction in foundational concepts and applications

Wharton Global High School Investment Competition

September – December 2023

Team Leader and Semifinalist (50/1,600 global teams)

- Led a 6-person team in managing a \$100,000 stock portfolio for a hypothetical client
- Developed and executed investment strategies that aligned with the client's financial goals and personal values

Sobo Foods, San Diego, CA

June – July 2023

Market Research Analyst

- Collected and analyzed nutrition, branding, and pricing data
- Used Matplotlib to gain insights into competitor pricing, translating complex datasets into actionable insights

Management & Technology Summer Institute (M&TSI) at UPenn, Philadelphia, PA

July 2023

- Prototyped a smart locker to streamline the EMS response, Purple Locker
- Integrated Arduino MEGA, a smart LED strip, and ultrasonic detection technology
- Developed the income statement, authored an executive summary, and conducted market research interviews

PUBLICATIONS

- Nathan Dai and Suleyman Uludag, "Performance Tradeoff in ML-based Intrusion Detection Systems: Efficacy vs. Resource Usage", *2024 IEEE Consumer Communications & Networking Conference (CCNC)*, Las Vegas, NV, January 2024, pp. 1030-1031. <https://ieeexplore.ieee.org/document/10454871>

ADDITIONAL EXPERIENCES

- **2022 and 2023 AMC 12**, AIME Qualifier
- **Greater San Diego Science and Engineering Fair**, 1st Award (2021), 2nd Award (2022, 2023)
- **2021 USA Computing Olympiad**, Silver Award
- **Culture Ebikes**, *Sales Associate*