

Education

Stanford University | Stanford, CA

September 2018 – June 2022

- **Major:** Computer Science (Artificial Intelligence track), **GPA:** 4.09/4.00
- **Relevant coursework:** Programming Abstractions, Computer Organization & Systems, Probability for Computer Scientists, Linear Algebra, Multivariable Calculus, Mathematical Foundations of Computing, Artificial Intelligence: Principles and Techniques, Principles of Computer Systems, Web Applications, Natural Language Processing with Deep Learning, Machine Learning

Saratoga High School | Saratoga, CA

August 2014 – June 2018

- **GPA:** 4.71/4.00
- AP Exam – Computer Science A: 5
- Scholar of Distinction Los Gatos-Saratoga Joint Union School District | 2015, 2016, 2017, 2018
- Bausch + Lomb Honorary Science Award | 2017
- National Hispanic Scholar | 2017

Technical Projects & Experience

Software Engineering Intern | Apple

June – September 2020

- Currently improving performance of a machine learning model to effectively cluster crash log files.

Software Engineering Intern | Quadric

June – August 2019

- Implemented the backend for six CNN layers in a C++ based intermediate language designed for optimal performance on a specialized edge-computing hardware architecture at this startup.
- Analyzed compile-time optimizations and run-time optimizations for a deep learning network.
- Studied post-training quantization of neural net models to improve performance during inference.

Photo Sharing Web Application | CS 142

May – June 2020

- Developed a full stack ReactJS web application with a Node.js web server (ExpressJS). Utilized a MongoDB database and Material-UI front end components. (<https://youtu.be/mFzJm07WL5A>)

Optimized Task Scheduling Project | CS 221

November – December 2019

- Created a reinforcement learning algorithm using value iteration and Q-learning to optimize the prioritization of tennis racquet stringing jobs for a small local business.

Pac-Man and Autonomous Car Assignments | CS 221

November 2019

- Implemented pathfinding algorithms to dictate optimal actions in various maps, maximizing reward while minimizing cost. Concepts included minimax, alpha-beta pruning, and Bayesian Networks.

Heap Allocator | CS 107

March 2019

- Designed implicit and explicit heap allocators from scratch, balancing utilization and throughput.

Project SEED (Student Entrepreneurs for Educational Development) – President

2015 - 2018

- Collected and sold used vegetable oil. Donated proceeds (\$13,000 by 2018) to underfunded high school departments. Purchased a 3D printer for Saratoga High School Engineering Department.

Activities & Volunteering

Stanford University Varsity Tennis Team

September 2018 - present

- Balancing 20+ hours/week of training as a member of a Division I team ranked in the top 10 nationally with a full academic course load.

United States Tennis Association (USTA) Tennis and **Saratoga High School Varsity Tennis**

2008 - 2018

- Universal Tennis Rating of 12. 4-star recruit on tennisrecruiting.net. Ranked as high as 50 nationally.
- High school: Team Captain, Team MVP, undefeated in 2017 and 2018. Team ranked #1 in SCVAL.

Abacus at Jin's Mental Arithmetic Academy

2007 - 2018

- Learned to use the abacus – a Japanese tool for fast mental math calculations.
- 1st place in Mental Dictations at the international level | 2015, 2016, 2017.

Friends of Children with Special Needs (FCSN) – abacus community service**South Bay Smash** – wheelchair tennis community service**Skills & Interests**

Programming Languages: C++, Python, C, Java, JavaScript, Assembly, Swift, HTML, CSS**Tools:** NumPy, PyTorch, TensorFlow, MongoDB (NoSQL), Microsoft Azure, Git, Unix**Clubs/Interests:** Stanford Student Athlete Advisory Committee, Stanford Christian Students, SNL