Naren Sathishkumar

narens11676@gmail.com | **(510) 396-1388**

Motivated high school junior with interests overlapping in the fields of data science and quantum computing

EDUCATION
American High School, Fremont — *Class of 2024*
- GPA: 4.0 unweighted
- Completed AP Courses: AP European History (5), AP Spanish Language (5), AP Computer Science A (5)
- In progress AP Courses: AP Calculus BC, AP English Language, AP Physics 1, AP Chemistry

Harrisburg University
JUNE 2020 - MARCH 2021
- Harrisburg University: Quantum Computing Academy, and Exploring Quantum Computer Algorithms

Ohlone College
JUNE 2022 - AUGUST 2022
- UNIX/Linux Shell Scripting at Ohlone College, received 4.0 GPA

RESEARCH EXPERIENCE AND IMPACT
Quantum Summer Program at University of Waterloo
JULY 2022, 30 HR/WEEK, 2 WEEKS
- Selective global program: only 40 students internationally
- Lab experience with quantum hardware at the Institute for Computing at University of Waterloo, and learned the physics and mathematical theory behind modern quantum computing

Quantum Research Project
MAY 2021 - SEPT 2021
- Interned with Professor Terrill Frantz from Harrisburg University, Amazon Braket and QuSecure on a research project to test the limits of quantum factoring algorithms
- Worked to create classical logical gates on quantum hardware (D-Wave Leap), used to build a reverse multiplication circuit (a type of quantum factoring algorithm)
- Published my contributions to the research project in a Medium article

Quantum Research Publications
FEB 2021 - APR 2021
- Created a research poster related to the previous research project
- Poster was accepted to be presented at ISEC IEEE 2021, a conference known for "cutting-edge research and experiences" for STEM fields
- Poster was presented at ISEC IEEE 2021

COMMUNITY ENGAGEMENT
Google CS First Club
JUNE 2022 - PRESENT, 4 HR/WEEK
- Executive officer at American High School's Google Computer Science First Club, currently creating curriculum centered around Android App Development for club meetings during the 2022-23 school year

American High School Web Development Club
SEPTEMBER 2021 - PRESENT
- Events coordinator for the American High School Web Development Club, organized a national hackathon for web development with ~100 participants

Coding Tomorrow Initiative
MARCH 2022 - JUNE 2022, 4 HR/WEEK, 16 WEEKS
- Developed and taught curriculum centered around Java Game Development via Swing to local middle schoolers with a team of peers

ENGin
OCTOBER 2021 - MAY 2022, 2 HR/WEEK
- Zoom sessions with a Ukrainian student to improve their conversational English and intercultural skills, in order to allow them to pursue their interests using advanced English skills
- Created content that was educational and interesting to the student in order to keep them involved during the sessions

PROJECTS
Object Detection on the Roads — *Github*
- Personal project: Used neural network frameworks such as Darknet and YOLO to train a program to recognize objects on the road

Virtual Self-Driving Car — *Github*
- Personal project: Used Deep Q-Learning, Keras neural networks, and an Epsilon Greedy Policy to create a 2D virtual car that would teach itself to drive around a racetrack