

KAVYAN PATEL

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EDUCATION

University Of California Santa-Cruz Honors (California Scholars Program)

B.S. Computer Science
Cumulative GPA: 4.0

Santa-Cruz, CA
September 2022 - July 2026

Dougherty Valley High School

Cumulative GPA: 4.2

Relevant Coursework: AP Computer Science A, AP Statistics, AP Calculus AB, Honors Physics, AP Biology, AP Macro/Micro

San Ramon, CA
August 2018 - June 2022

University of Michigan

Python For Everybody Coursera, Web Application Technologies, and Django

August 2022 - Present

EXPERIENCE

Safari Kids

Coding Summer Intern

- Designed curriculum and taught software and hardware-related topics to middle schoolers, including robotics, claymation, web design, python, and 3D printing.

Pleasanton, CA
June 2022 - September 2022

Dougherty Valley High School Robotics

President

- Managed logistics for four teams while gathering resources for the addition of a fifth team
- Led the planning and setup for one of the biggest tournaments in NorCal, with 50 teams in attendance.
- In charge of planning and logistics for an out-of-state trip to the VEX World Championships, where DVHS Robotics had its most successful run in 12 years, qualifying for a round-robin among the top 20 teams in the world.

San Ramon, CA
2021 - 2022

Captain and Lead Programmer for VRC Team 5776A

- Led the Design and Programming of VRC Team 5776A's competition robot and assisted in the building process.

2020 - 2022

Treasurer

- Managed \$35,000 in funds with the creation of a yearly budget

2020 - 2021

Public Relations Officer

- Raised funds through sponsorships, including a \$7,500 sponsorship from Autodesk
- Led the planning and organization of a robotics summer camp for middle schoolers, through which the organization raised \$28,000

2019 - 2020

PROJECTS

Roaming In Space [<https://github.com/K-Pat/PygameProject>]

- Created a 2-Dimensional spaceship game using Python and a python wrapper for Simple DirectMedia Layer called Pygame.
- Roaming In Space is a work in progress and currently features a menu screen, pause menu, scorekeeping, movement functions, OOP, simple graphics and event handling, and state checking.

VRC Team 5776A [https://github.com/K-Pat/5776A_2021-2022]

- Code for VRC Robot, 5776A, coded in C++ and developed over the course of 1 year.
- Implemented 2D Motion Profiling by using PID feedback loops which read values from integrated motor encoders and the average heading value from two inertial sensors combined to provide relative and absolute movements.
- Developed Autonomous and Driver assisted movements, as well as driver control code.
- Utilized a state machine system to manage 5 subsystems.
- Gained Award recognition at the California State Championships for efficient code that contributed to our teams high win percentage

Personal Website: [<https://github.com/K-Pat/k-pat.github.io>] | [kavyanpatel.com]

- Created a Personal Website to showcase personal projects, experience and pictures from college.
- kavyanpatel.com utilizes HTML, CSS and Javascript to display images, text, create buttons, Navigation bar, multiple pages and an image gallery.

TECHNICAL SKILLS

- Python, Java, and C++ programming languages, SQL, Django, Flask, HTML, git
- Basic control theory involving motion profiling, PID feedback loops, and Odometry
- Structural and functional design for robots, including bracing, electronic and pneumatic systems, 3D printing, Autodesk Fusion 360 CAD