Kevin Shvodian

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Education:

University of California Santa Barbara, CA — Sept. 2021 - June, 2025

Bachelor of Science, Mechanical Engineering GPA: 3.8

CNSI Innovation Grant Winner ($3000): lead a team that developed a computer vision powered sports training robot (LaxBot) as part of the 2024-2025 Mechanical Engineering Capstone program. Trained a custom computer vision model and implemented it into a native iOS app. Designed and fabricated custom hardware to aim and launch lacrosse balls at game realistic speeds.

Relevant coursework:
Mechatronics, machine learning, vector calculus, differential equations, fluid mechanics, thermodynamics, circuits, strength of materials, statics, CAD/CAM

Experience:

ShapeShift Crawlers, Hardware Design Consultant — Spring 2025

- Worked with UCSB physics professor Rob Geller to design a novel lunar exploratory vehicle powered by shape memory alloys
- Completed thermal simulations in COMSOL, designed prototype crawlers in Fusion, fabricated prototype crawlers in order to test design reliability

Kev-Bots, Founder/Camp Counselor — Summer 2024

- Marketed and ran my own Lego robotics camp for middle school students
- Designed an open source, 3d-printable, Lego robotics system to make use of affordable and generic robotics components
- Created a full robotics curriculum suited for campers of multiple skill levels

Hatch, Embedded Systems Intern — Summer 2022

- Created reference documents for the various custom functions and objects in C used by the embedded team
- Tasked with creating a demo program to showcase a potential new feature of Hatch's flagship product
- Worked alongside the other interns to design and market a potential new product for Hatch, and worked with the CEO to pitch this new product to the entire company

Activities:

UCSB New Venture Program:
Competed in UCSB's startup competition with my computer vision powered lacrosse training robot, LaxBot. Developed a business and marketing plan, as well as calculated key metrics.

Lacrosse:
Over 15 years of competitive lacrosse. Started as goalie for UCSB club lacrosse team. Voted co-rookie of the year for the 2022 season. Coached various high school and youth lacrosse programs.

Skills:

- Fusion 360, Solidworks CSWA certified, Onshape, CATIA
- FEA: COMSOL, Fusion, Solidworks
- Rapid prototyping processes (3d printing, laser cutting)
- Computer vision: YOLO, open
- Machining experience (CNC mill, manual mill, lathe)
- Embedded Systems: C, Arduino, Python
- Circuit Design (component selection, PCB, soldering)