

# Jacob Vazquez

San Francisco, CA • [jacobvazquez.com](mailto:jacobvazquez.com) • [github.com/Jacob9610](https://github.com/Jacob9610) • [vazquezjake@live.com](mailto:vazquezjake@live.com) • (832) 431-7357

## Experience

---

### President — BitBots (Hardware & Electronics Club) (2023 – 2025)

- Led a student club focused on hardware, robotics, and electronics projects.
- Organized workshops on Arduino, Raspberry Pi, and sensor integration.
- Mentored members on personal and group projects, transitioning club to support individual initiatives.

### Vice President — 3D Printing & Design Club (2023 – 2025)

- Coordinated 3D printing resources for students and faculty.
- Assisted with design workshops and hands-on prototyping sessions.
- Helped secure lab space and equipment access for members.

### Lego Robotics Instructor — (Summer 2025)

- Taught Lego Robotics to grades 3–7, introducing mechanical design and basic programming concepts.
- Designed structured activities to engage students in problem-solving and teamwork.

### Peer Mentor – Robotic Microscopy Team — CCC Summer Course (Summer 2025)

- Mentored students in robotic microscopy research with *\*Stentor coeruleus\**.
- Guided hands-on projects integrating Raspberry Pi, imaging, and automation.
- Supported team collaboration and project presentations.

### Undergraduate Researcher — Esquerra Lab, SFSU (2023 – 2025)

- Led the RoboCam project, repurposing 3D printers for automated microscopy.
- Developed imaging assays for *\*Stentor\** and *\*Drosophila\** behavior experiments.
- Contributed to FlyShock and Stentor Cam projects, combining hardware and software systems.

### Discussion Leader — SFSU Summer Bridge Program (Summer 2025)

- Facilitated peer-led discussions for incoming first-year students.
- Mentored students on college transition, study habits, and campus resources.

### Officer / Member — ACM Chapter, SFSU (2023 – 2025)

- Collaborated with officers to foster a strong community of computer science students.
- Assisted in organizing hackathons and technical workshops.

## Education

---

### B.S. Computer Science

*San Francisco State University (2021 – 2025)*

### Machine Learning Specialization

*Coursera (2024)*

### React & TypeScript Bootcamp

*Udemy (2023)*

## Skills

---

Software: JavaScript, TypeScript, React, Node.js, Express, Tailwind CSS, MySQL, Vitest, Python, C, C++, Java  
Hardware: Raspberry Pi, Arduino, CircuitPython, DC/Stepper Motor Control, Sensors (IR, Ultrasonic, Color, Joystick), NeoPixels, 3D Printing (Sovol, Prusa), Soldering & Circuit Prototyping  
Research: Microscopy (Stentor, Drosophila assays), Behavioral Imaging Automation, Data Collection & Analysis, Lab Equipment Adaptation, Collaborative Research Projects  
Leadership & Teaching: Workshop Design & Facilitation, Peer Mentorship, K-12 STEM Instruction (Lego Robotics), Leadership (BitBots, 3D Printing & Design Club), Event Organization (BitBots, ACM)