

DVC SPATIAL LAB

Build. Learn. Explore.

Help build a makerspace at DVC with Charles Sun.



WE'RE HIRING

Join the DVC Spatial Lab leadership team.

Secretary

Organize meeting notes, records, and club communications.

ICC Representative

Represent the club at ICC meetings and share campus opportunities.

Marketing / Media Manager

Create content and promote club projects and events.

01 Build a makerspace at DVC

Collaborate on practical builds and share tools. Work toward a dedicated student workspace where ideas become prototypes and students learn together.

02 Projects & workshops

Explore circuits, sensors, Arduino robotics, and computer vision through hands-on projects with guidance from Charles Sun. Move from a first demo to a working prototype.

03 Atlas research

Can a robot remember a space and navigate it after things move?

Start with mapping and navigation in simulation. Compare spatial memory against a baseline, and work toward reproducible experiments, an open-source demo, and a student research paper.

All majors welcome. Beginners belong here.

Interested? Connect with the DVC Spatial Lab organizing team.

Charles Sun

Electronics Instructor

Diablo Valley College

Faculty Advisor | DVC Spatial Lab



ELECTRONICS EDUCATION & ROBOTICS PRACTICE

Charles Sun is an electronics instructor at Diablo Valley College and faculty advisor to DVC Spatial Lab. His interests span mobile robotics, embedded hardware, and practical experimentation. Alongside teaching Electronics I, he participates in the HomeBrew Robotics Club community, sharing technical observations and project findings that connect electronics, software, and physical systems.

SELECTED TEACHING & TECHNICAL WORK

Electronics instruction

Diablo Valley College | 2026

Teaches EET-116, Electronics I. The Summer 2026 schedule includes a section serving the Tesla Test and Control cohort, placing electronics instruction within an applied technical training context.

Mobile robotics & embedded hardware

HomeBrew Robotics Club community | 2025

Set up and operated an EarthRover Zero using cellular teleoperation. Documented its controllers, GPS, IMU, cameras, and communications hardware, and shared observations on system behavior and software limitations with fellow robotics practitioners.

AREAS OF PRACTICE

- Electronics education
- Mobile robotics
- Embedded hardware
- Technical experimentation

INSTITUTIONAL CONTACT

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Diablo Valley College

DVC SPATIAL LAB | FACULTY ADVISOR

Supporting a student-led maker community through electronics and robotics projects, practical workshops, and faculty guidance. The club aims to develop a shared makerspace and an Atlas research track exploring spatial memory and navigation.