

# Aadish Verma

1st place, OHS Labor Day Hackathon (2024) · 1st place, OHS Labor Day Hackathon (2025) · Winner, Advanced Python Society Hackathon (2025) · VRC tournament champion · Excellence Award recipient · 3× tournament finalist

[mail@aadishv.dev](mailto:aadishv.dev) [aadishv.dev](https://aadishv.dev) [github.com/aadishv](https://github.com/aadishv) [extended background](#) [spring 2026 résumé](#)

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## Founding Developer · JV Copilot

2025–present

- Build core product infrastructure for a joint-venture marketing platform used by small businesses, with several waitlisted customers and paid preorders.
  - Own backend and orchestration-heavy systems centered on cost-efficient scaling, query performance, and reliability for a product intended to support hundreds to thousands of users.
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## PixelSat · software co-lead

2025–present

- Help lead software for a student-built 3U CubeSat project targeting launch to LEO in November 2026.
  - Work on satellite software architecture, including a dual ESP-RPi design, communications-stack decisions around transceivers, and reimplementing of multiple network protocols in `no_std` Rust.
  - Built an AI agent that manages the project knowledge base conversationally in Discord and Pronto.
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## Autonomous Robotics Systems · VEX AI / VRC

2023–2025

- Led programming for VEX teams across VRC and VEX AI; won multiple tournament finalist placements, a tournament championship, and an Excellence Award in VRC.
  - Built a custom computer-vision stack in under two months to train and run a YOLOv5n model on a Jetson Nano, plus tooling for debugging and observability.
  - Built a GPU-accelerated Monte Carlo localization pipeline for Jetson Orin Nano + RPLiDAR A1 using Rust, C++, and Python connected through FFI and Zenoh.
  - Designed a custom communications layer for Jetson Nano ↔ V5 Brain interop in VEX AI competition robots.
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## Open source and technical writing

Ongoing

- One of the main contributors to [Venice](#), an independent community port of MicroPython to the VEX platform, currently focused on the devices API and other high-level systems work.
  - Contributed code to [LemLib](#) and [vexide](#), and authored a critical bug-fix PR to the [RPLiDAR SDK](#).
  - Maintain a technical blog at [aadishv.dev](https://aadishv.dev) with interactive explanations of robotics and controls concepts such as PID, motion control, and localization used by teams learning advanced topics.
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## Teaching, mentoring, and student software

2024–present

- Peer tutor and TA for mathematics courses at Stanford Online High School.
  - Tutor students locally in mathematics and related coursework.
  - Regularly mentor newer robotics teams, volunteer at competitions, and support annual Girl Powered outreach events.
  - Led first-place teams at the 2024 and 2025 OHS Labor Day Hackathons and won the Advanced Python Society 2025 hackathon as a solo team.
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## Stanford Online High School · freshman

2024–present

- Coursework including Multivariable Calculus, AP Biology, Biostatistics, and Chinese 2.
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## Freelance web work

2025–present

- Maintain and iterate on a production website for a local real estate contractor, handling ongoing updates and general web development support.