Abhigyan Arya

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Education

University of California, Irvine — Irvine, CA
B.S. Computer Science and Engineering, Minor in Mathematics ***GPA 3.98/4.0*** — *Sep 2023 – June 2027*

Experience

Opennote (YC S25) — San Francisco, CA
Co-Founder & CTO — *Nov 2024 – Present*

- Founding team member, scaling platform development and product growth from 0 → 20,000+ MAU (60,000+ total), as both product owner and #1 code contributor, and sole developer across all backend infrastructure.
- Designed architecture for multiple agent systems, realtime collaboration stack, security systems, text-to-video generation pipeline, and developer APIs and SDKs for customer and consumer-facing use.
- Led all technical aspects of product development, including partnerships with Meta & Groq, SOC II Compliance, alongside research tasks, such as document retrieval systems, durable objects, LLM benchmarks, etc.

Browserbase — San Francisco, CA
Software Engineering Intern — *March 2025 – May 2025*

- First (of 3) engineers on team building Director, Browserbase's first consumer-facing tool for web automations.
- Designed browser infrastructure and session management stack, and developed core code-generation pipeline.
- Worked directly under the CEO and investors (from CRV, Kleiner Perkins, etc.) to beta test pre-release product.

NASA Johnson Space Center — Houston, TX
Pathways Software Engineering Intern — *Aug 2024 – Nov 2024*

- Prototyped and implemented fuel-efficient control algorithms for autonomous vehicle control in C/C++, analyzing embedded footprint and compute constraints in VxWorks for presenting flight software to program leadership.
- Implemented data cleaner and software verification workflow with Linux Shell Scripts, Python (Pandas/Numpy), GitLab CI, and SQLite3 to analyze software integration with Northrop Grumman and MAXAR components.
- Owned, documented, designed, and fully developed multiple human operation tools for downlinked data in React and TypeScript for the Gateway Space Station, with high approval from flight operations personnel.

Software Engineering Researcher — *Dec 2023 – Jun 2024*

- Engineered inter-device spacewalk guidance system, leading 10 engineers to develop Human-In-The-Loop software and Python API for spacesuit sensor data along TypeScript/React control application for real-time navigation.
- Coordinated fundraise for $8000+ in research grants to demonstrate Spacewalk Mission Simulations at NASA's Lunar Testing Facilities, and to further innovate on Human-System Integration/Algorithms Research.

Projects

Runway | *Cloud Computing, Browser Agents, LLM Fine-Tuning* — *runway0.vercel.app*

- Designed end-to-end AI deployment pipeline allowing for dataset generation,model training, inference, and deployment on cloud providers purely through natural language in 30 hours at TreeHacks 2025.

Block Thing | *HackMIT 2024 Winner* — *github.com/uno-p-5/blockthing*

- Developed a full-fledged product for Educational Technology, leveraging Figma, Google Blockly, and OpenAI o1 to simplify coding for kids with AI and adaptive UX; Received product accolades from Y Combinator, Citadel, etc.
- Leveraged few-shot LLM fine-tuning method to tailor responses to students, and integrated a native compiling system using Python to allow AI agents to interact with code environments, enhancing software education.

UCI CubeSat Research Project | *Avionics Team Lead*

- Engineered system architecture for automated orbital navigation and control in C and Linux.
- Architected subscription-based events framework to streamline ground operation connections and data transfer.
- Led 8 person team to perform computation and downlink testing for long-term spaceflight.

Skills

Languages: Python, TypeScript, C/C++, SQL, JavaScript, Bash, Java, Go, Rust
Technologies: Docker, React, GitHub, NodeJS, Next.js, Flask, FastAPI, Linux, AWS, Figma
Awards: Y Combinator S25, UCI Excellence in Undergraduate Research Award, California Space Research Grant