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)

Co-Founder & CTO

San Francisco, CA

Nov 2024 - Present

- Founding team member, scaling platform development and product growth from $0 \rightarrow 20,000 + \text{MAU}$ (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 <u>Director</u>, 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 2022

- 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

runway 0. 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

qithub.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, K8S, Figma

Awards: Y Combinator S25, UCI Excellence in Undergraduate Research Award, California Space Research Grant