

Arnav Bonigala

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Education

University of California, Berkeley, *Computer Science* | Berkeley, USA

May 2030

Notable Courses: CS61A, CS61B, Math 52

Honors & Awards

NASA Space Apps Challenge	Global Finalist Honorable Mention (Top 1%) — Modeled <i>C. elegans</i> in microgravity
PicoCTF	18th Place (HS Division) — Ranked Top 1% among 1,800+ teams nationally
ACSL	1st Globally — Senior Division Regular Season, Perfect Score (48/48) & Finals Silver Medal

Experience

Stablein Solutions, Jr. Software Developer | Remote

Apr 2025 – Aug 2026

- Built and launched an AI-powered trademark analysis service as the sole initial developer, using computer vision and multimodal LLMs to detect logos across PDFs, EPS/vector files, and images, identify companies, classify industries, score confidence, and flag high-risk visuals.
- Scaled trademark processing to thousands of files through multi-page analysis, batch workflows, duplicate consolidation, and cached business lookups, reducing manual review time by 90% for a production system used by clients.
- Developed a customer intake and automation platform as the sole developer, replacing a client's 30-year email-based onboarding process with structured data collection and automated legal-document validation before handing the system off for client-managed deployment.
- Enhanced a production purchase-order automation system by resolving bugs and delivering new features for ingesting purchase orders in varied formats and transforming them into validated, item-linked JSON.

Pebble Education, Co-Founder & President | Remote (Florida, USA)

Jul 2023 – Present

- Raised 100K+ in sponsorships and in-kind support from organizations including WolframAlpha and Gen.xyz, funding 25+ student-built software and hardware projects.
- Built an adaptive learning platform using Python and web-based tooling to personalize lesson pacing and content delivery for students with disabilities.
- Led 2 large-scale hackathons and 15+ coding workshops reaching 200+ students across 10 schools, incorporating WCAG 2.1 AA accessibility principles into program and project design.
- Established partnerships with school districts, nonprofits, and educators in 5 states to integrate Pebble-developed tools and technology-focused curricula into special education classrooms.
- Expanded access to computer science and data science education for students with disabilities, contributing to 500+ cumulative student-hours of technology-focused instruction.

Projects

Tycho – AI Coding Agent Verification Tool

- Built a Python CLI that verifies AI coding-agent work by recording files changed, commands executed, exit codes, and agent claims, then checking those claims against local artifacts and Git state.
- Designed deterministic, local verification with no LLM in the trust path, supporting Claude Code and Codex across macOS, Linux, and Windows.

FlowDock – Open-Source macOS Activity Layer

- Developed an open-source macOS application in Swift that turns the display notch/top edge into an activity layer for music, system controls, calendar events, notifications, downloads, and files.
- Built support for third-party extensions, multi-display layouts, accessibility settings, signed in-app updates, and privacy-conscious system integrations.

Skills

Languages	Python, C++, TypeScript, JavaScript, Java, SQL
Frameworks & Development	React, Flask, Django, Node.js, PostgreSQL, Supabase, Docker, Git
AI	LLMs, Prompt Engineering, LLM-Powered Automation
Tools	REST APIs, GitHub, Linux/Unix

Clubs

Advanced Programming Society – Co-Leader, *Stanford Online High School*

Aug 2023 – Jun 2026

- Lead 120+ member club training for the USA Computing Olympiad through weekly algorithm workshops and contests.
- Taught advanced topics including dynamic programming, graph algorithms, and search methods.
- Mentored members to reach USACO Platinum within one year of joining.