Ashwin Prabou

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EDUCATION

University of California, Santa Cruz   Santa Cruz, CA
B.S. in Computer Science; GPA: 3.68/4.0   *Expected June 2026*
- **Relevant Coursework**: Software Engineering, Data Structures & Algorithms, Machine Learning, Operating Systems, Computer Systems, Linear Algebra, Discrete Mathematics, Probability and Stats
- **Affiliations**: UCSC Google Developer Group , Santa Cruz AI, Slug Gaming Club, Slug AI

TECHNICAL SKILLS

Languages: C/C++, Python, Pandas, TypeScript, Java, HTML, CSS
Frameworks: React,JS, NodeJS, ExpressJS, Tailwind CSS, PyTorch
Technologies: Docker, Firebase, MongoDB, Supabase, Git, GitHub, Visual Studio, IntelliJ, Vim, GDB

EXPERIENCE

Software Development Engineer Intern   Jan 2025 - Present
Perfint Healthcare   *Remote*
- Engineered a **C++ shortest-path routing algorithm** for MAXIO®, **enhancing** instrument-path **accuracy** by **15%** and **accelerating** pre-operative planning **3x**, enabling faster, more **precise** CT-guided interventions
- **Integrated** the new algorithm into MAXIO®'s software pipeline—**synchronizing** with respiratory gating and multi-series **image registration**—to provide reliable, **real-time** intraoperative guidance
- Collaborated in **agile** sprints with clinical engineers and software teams, **leading** weekly demos and code **reviews** to refine requirements and **fast-track validation** against regulatory standards

Project Manager   May 2025 - June 2025
SlugAI   *Santa Cruz, CA*
- **Orchestrated a cross-functional squad of 8** (2 PMs, 4 SWE, 1 UX, 1 data) to ship an end-to-end prototype: device-pairing widget, menstrual-phase-aware dashboards, and Fitbit/Apple Watch auth flow—**delivered MVP in 6 days, 1 week ahead of plan, passing 95 % of acceptance tests**
- **Redesigned MongoDB schema from Fitbit-only to device-agnostic**, partnering with backend leads to cut integration rework **-60 % (15 h → 6 h/sprint)** and enable future sensor streams (sleep, HR, HRV)

PROJECTS

MedWise - SFHacks '25 Winner: Best Accessibility Hack | *TypeScript, Next.js, Flask, Python, GraphRAG*
- Built a **React** & **Python** web app integrating FDA-approved drug data, enabling users to discover cheaper brand-name alternatives and **save $1,000+ per year** (with **CORS** configured for seamless frontend-backend communication)
- **Engineered** a **GraphRAG** retrieval model using **RegEx** and the **Gemini API** to accurately **query** and **display 40+ drug records** (names, ingredients, retailers) for **real-time**, reliable insights

GauchoClass - SBHacks XI Winner: Best Use of AI | *TypeScript, Next.js, Flask, Python, Pandas*
- Engineered an **AI-driven** recommendation engine **analyzing 100+ UCSB courses** and student transcripts with **Pinecone** vector search, **RAG** & **Claude Anthropic**, delivering **personalized** course suggestions based on individual academic profiles and learning styles
- Integrated a **Flask chatbot** into a **Next.js** frontend with a **Tailwind CSS** pop-up UI to provide **real-time**, contextual academic guidance

RightsNow | *TypeScript, Next.js, Flask, Python, GraphRAG*
- Built a **voice-powered** AI legal advisor with **React, Python, OpenAI Whisper** & **Gemini API**, converting spoken questions into **real-time**, actionable legal guidance
- **Optimized** the end-to-end **voice-to-response pipeline** for fast, reliable support in legal emergencies and enhanced accessibility with a **streamlined UI**

What's Bruin? | *TypeScript, NodeJS, Google Cloud, DAIN, Linkd*
- **Designed & launched** a personal-branding platform with **React, Node.js** & **DAIN AI (Linkd data)**, **matching 1,000+ UCLA students** to aligned alumni/faculty in real time
- Engineered a **service-matching algorithm** that **tripled recommendation relevance** and eliminated manual searches, driving **higher user engagement**