Sanjiv Simha

sasimha@ucsc.edu | (925) 725-9415 | San Ramon, CA
linkedin.com/in/sanjivsimha | github.com/sanjivsimha | sanjivsimha.com

EDUCATION

University of California, Santa Cruz | *B.S. Technology and Information Management* **September 2023 – June 2026**

- **Relevant Coursework:** Computer Networks (CSE150), Database Management Systems (CSE182), Computer Systems and C Programming (CSE13S), Applied Discrete Math (CSE16), Technology Product Management (TIM172A)

EXPERIENCE

Frontend Software Engineer | *UCSC Information Technology Services* **June 2025 – Present | Santa Cruz, CA**

- Ship 4+ PRs across 2 GitHub repos, fixing frontend styling regressions, accessibility defects, and documentation gaps — and fixing security-relevant LDAP queries in the production codebase.
- Close out 184+ ServiceNow tasks and provision 15+ WordPress sites by coordinating batch updates and security releases with CampusPress and internal teams across 60+ archived faculty sites.
- Raise WCAG accessibility scores from 6.1 to 9.8 on production Gutenberg blocks using WAVE, Siteimprove, and AInspector — merging 1 form label fix and training 1 teammate on accessibility testing.
- Resolve Docker and LDAP environment failures by diagnosing a server endpoint misconfiguration, then document setup processes across 2 repos to accelerate onboarding for 2 teammates through 3+ pairing sessions.

SOFTWARE PROJECTS

FIXT (SacHacks 2026 Project) | *TypeScript, Next.js, React, PostgreSQL* **February 2026**

- Architected a full-stack Next.js and Supabase platform with 7 REST API routes, implementing intelligent payload leaning that reduced dashboard API response size by ∼70% in 24 hours.
- Engineered a two-tier predictive fault detection engine in TypeScript, analyzing 24-hour telemetry streams to assign confidence scores (52–91%) and enable preventive maintenance.
- Built a map-based dispatch system using React Leaflet that tracks technician locations and calculates the nearest available responder, featuring animated route playbacks to reduce deployment times.

GrantShield (SFHacks 2026 Project) | *React, Full-Stack Architecture* **February 2026**

- Designed and shipped a full-stack risk assessment platform end-to-end in 36 hours, integrating 5 third-party data pipelines simultaneously to highlight rapid execution capabilities.
- Programmed a cross-application duplicate detection algorithm that flags identity reuse attacks using shared data points (SSN, email, phone, address), reducing manual review bottlenecks.

SlugLabs (CruzHacks 2026 Winner) | *Python, MongoDB, RESTful APIs, Google Gemini API* **January 2026**

- Won 1st place out of 88 teams by shipping a full-stack AI-powered research platform in 36 hours that matches students to 200+ faculty research positions with one-click applications.
- Integrated the Google Gemini API as an LLM-driven matching engine that ranks opportunities by student interests and generates personalized application materials, reducing manual search time for users.
- Engineered an automated ingestion pipeline using a Python web scraper and n8n workflow automation, aggregating 200+ listings from 5+ disparate university sources into a unified MongoDB database.
- Designed a scalable RESTful API layer with Auth0 OAuth 2.0 authentication enforcing UCSC-only access, supporting concurrent sessions and real-time AI-personalized opportunity updates.

Brain Tumor MRI Classification System (SCAI Competition Winner) | *PyTorch, TensorFlow* **March 2025**

- Won the SCAI Is No Limit Competition at UC Santa Cruz by building a CNN that classifies brain MRI scans across 4 tumor categories with 94% overall accuracy on 1,311 test images.
- Architected a 4-block convolutional pipeline processing 256x256 RGB inputs with ReLU activation and MaxPool2D dimensionality reduction, achieving 98% accuracy on pituitary tumor detection and near-perfect no-tumor classification across 690+ scans.
- Optimized the PyTorch and TensorFlow training pipeline by restructuring model architecture and adding pooling layers, reducing training time from 24+ hours to under 2 hours without sacrificing accuracy.

SKILLS

- **Languages:** Python, TypeScript, JavaScript, SQL, Java, C/C++
- **Frameworks & Libraries:** React, Next.js, PyTorch, TensorFlow, Node.js, Tailwind CSS
- **Tools & Technologies:** Supabase, Git/GitHub, Docker, RESTful APIs, Jira, ServiceNow, Claude, Codex, Figma