

SAKSHAM RAI

(408) 513-5080 | s1rai@ucsd.edu | sakshamrai2001.netlify.app | linkedin.com/in/sak2001 | github.com/sakshamrai101

Education

University of California San Diego | *La Jolla, California*

Expected Graduation: *June 2024*

- **Degree:** BS. Mathematics-Computer Science, Double Minor – Cognitive Science, Innovation and Entrepreneurship
- **Associations:** UCSD Speech and Debate, Rocket Propulsion Laboratory, Engineers for Exploration, CS ForEach
- **Achievements:** Departmental Honors (x7), College Honors (x1) Blackstone Launchpad Program

Skills

- **Interests:** Scalable Website/Web-App Development, Data Science, Machine Learning and Artificial intelligence.
- **Front End:** HTML, CSS, JavaScript
- **Back End:** PHP, Python, Java, C++
- **Other Frameworks:** React, Node.js, Vue.js MongoDB, phpMyAdmin, SQL, Android Studio and Git.

Experience

Founder, CTO | *Karya – Productivity*

April 2023 - Present

- Co-founded an AI-powered productivity SaaS startup at UCSD's The Basement; secured off-cycle recruitment.
- Developed Karya's UI prototype with Uizard and launched an engaging product website, highlighting company vision and key product features.
- Spearheading MVP development using React, Node.js, and MongoDB, amassing 100+ beta testers.
- Optimizing LLM models like DistilBERT and GPT-3 for strategic academic planning.

SDE Intern | *San Diego Police County*

Dec 2022 – June 2023

- Developed an SEO-optimized website for HRCSD's Naloxone Program using HTML, CSS, and JavaScript.
- Engineered a secure registration system via PHP and MySQL; onboarded 15,000+ users in 4 months.
- Automated data transfers from 12 anti-opioid machines and 6 NAP sites to UCSD.
- Established a portal for Naloxone reversals and potential NAP site reporting, onboarding 150+ collaborators.

SDE Intern | *Black Logics*

Sept 2022 – Dec 2022

- Overhauled BlackLogics' website pre-production, enhancing visuals and interactivity using Figma, CSS, HTML, and Js.
- Boosted SEO with faster loading speeds through image minimization, browser caching, and keyword optimization.
- Implemented SSL certification and fortified server-side input validation to ward off SQL injections.

Cloud System Architect | *Information Technology Services, UCSD*

Sept 2022 – Dec 2022

- Managed EPBC Dashboard for UCSD venture budget planning for the fiscal year.
- Crafted Groovy scripts for budget calculations and intercube data operations.
- Employed Jira for issue management and ramp-up training coordination.
- Employed EMP Automate Batch Scripts for password encryption and Oracle EPM updates.

Projects

Operational Airline Delay Data Science Project

November 2023

- Conducted EDA of 18 airlines' 25-year financials and delay data, emphasizing data wrangling, data visualization and outlier analysis.
- Performed Linear Regression testing on expenses and revenue, scaled by the average delay of each airline to test the relationship between operational investments and average delay incurred.
- Co-authored a substantive academic paper, synthesizing analytical insights drawn from the research.

Moon-Markers 2.0 | *Nasa Space Apps 2023 Hackathon*

October 2023

- Developed a 3D moon visualization using NASA's CGI Moon Kit with React and Three.js.
- Integrated Flask and Python with JavaScript for dynamic data visualisation of the Apollo Seismic Event Catalogue.
- Highlighted moonquakes, Apollo mission landings, and key geological features.

Talk – To – Abel | *SDX – AI Hackathon 2023*

August 2023

- Developed a multi-language educational speech bot using Open Ai's GPT-4, TypeScript, React, and Node.js; ranked in the top 10 projects.
- Implemented real-time voice chat via WebSocket, bolstered with Zustand state management for secure, two-way interactions with Abel.
- Enhanced user experience by crafting unique personality profiles; driving higher user satisfaction and retention.