

Sahil Gathe

sahilsg.work@gmail.com | linkedin.com/in/sahilgathe | github.com/IndiSnacks | sahilgathe.dev |

EDUCATION

University of California San Diego,
Bachelor of Science in Computer Science

La Jolla, CA
Sept. 2021 – June 2025

EXPERIENCE

Doceo <i>Fullstack Software Engineer</i>	Aug. 2025 – Present Chattanooga, TN
<ul style="list-style-type: none">Delivered a 0 → 1 MVP of an AI-powered construction analytics tool, by building a React + Tailwind UI creating card components from streamed JSON responses generated by a LLM backend via REST APIs, and syncing state with Convex (real-time database).Built authentication and user-management infrastructure, enabling simplified org onboarding and automated Procore and Autodesk data ingest, by integrating WorkOS SSO, and OAuth 2.0 pipelines for data sync.	
UC San Diego Center for Energy Research <i>Student Software Engineer</i>	Jan. 2025 – June 2025 San Diego, CA

• Shipped a cross-platform climate impact visualization app enabling users to adjust renewable energy resources by region and visualize projected global temperature delta, adopted by the UCSD Center for Energy research, as a tool to showcasing new research, by developing an interactive frontend in **React Native**, and integrating **MongoDB** backend via REST APIs.

Qualcomm Institute Center for Health Design
Software Engineering Intern

July 2024 – Dec. 2024
San Diego, CA

- Engineered an AI-driven AR interaction system, showcased at the San Diego World Design Conference 2025, enabling voice controlled 3D-avatar movement and web window management, by building a JSON parser to route LLM tool-calling outputs to trigger **Unity** function via **API endpoints**.
- Improved LLM function-calling accuracy from 70% to 85% on a standardized set of 50 commands for Unity functions tool-calling by implementing a dynamic tool registry in **MongoDB** and function embeddings in **Qdrant**, enabling semantic search for available Unity functions per scene.

CLUBS

Design Co <i>Web Developer & Board Member</i>	Feb. 2024 – June 2025 San Diego, CA
<ul style="list-style-type: none">Developed and launched 4 websites for career fairs and design-a-thons which reached 500+ students and featured recruiters from Google, Epic and Deloitte by collaborating with an interdisciplinary team of designer, marketers, and developers using frontend frameworks, React (Vite and Next.js), Tailwind, and Vercel for deployment.Organized and led 5 technical workshops on web development fundamentals, creative coding, and introductory game design using the Godot game engine, teaching 100+ students.	

PROJECTS

GMTK Game Jam : Perpetua <i>Godot, GDScript</i>	Aug. 2025
<ul style="list-style-type: none">Design and developed a game for the GMTK game jam in 96 hours with a team of 3, landing in the top 10% of rankings out of 9643 entries. Developed using the Godot game engine to, and BlockBench and Procreate to design 3D assets.	
OpenGL Graphical Ray Tracing <i>OpenGL, C++</i>	Feb. 2023

• Built a graphics rendering pipeline with recursive raytracing to render 3D scenes with over 1000 geometries, using **OpenGL**, implemented Blinn-Phong shading, ray-surface interactions, and a bounding box acceleration model.

TECHNICAL SKILLS

Languages: JavaScript/TypeScript, Python, CSS, HTML, C#, Java, C, C++,
Frameworks: React, OpenXR, OpenGL, React Native
Developer Technologies: Git, Docker, MongoDB, VS Code, Unity, Godot, Node.js, express.js, Next.js, Generative AI