

# Sahil Gathe

(732) 640-6830 | [sahilsg.work@gmail.com](mailto:sahilsg.work@gmail.com) | [linkedin.com/in/sahilgathe](https://linkedin.com/in/sahilgathe) | [github.com/IndiSnacks](https://github.com/IndiSnacks)

## EDUCATION

**University of California San Diego,**

*Bachelor of Science in Computer Science*

La Jolla, CA

Sept. 2021 – June 2025

## EXPERIENCE

**UC San Diego Center for Energy Research**

*Student Software Engineer*

Oct. 2024 – Apr. 2025

San Diego, CA

- Develop an educational **web, IOS and android** application to visualize green energy data using the **React Native Framework**.
- Designed a database with 10,000 points of climate and energy data and programmed an API which enabled our application to do real time data visualization.

**Center for Health Design**

*Software Engineering Intern*

July 2024 – Dec 2024

San Diego, CA

- Developed software for the LifeSaver project integrating medical devices with AR overlays into a environment using **Unity** and the **Apple VisionPro SDK**.
- Engineered 3D visuals & interactions in using Unity shaders graphs for a custom medical **Generative AI**.
- Implemented a user database and programmed API endpoints so that the custom medical Generative AI could manipulate the data using **MongoDB**, and the **Mongoose** library.

**Design Co**

*Web Developer & Board Member*

Feb. 2024 – Present

San Diego, CA

- Program Managed the DCo Up-Grade Summer Internship program, connecting non-profit organizations with designers.
- Collaborated with a team of designers and developers, and presented free design workshops to prepare young professionals and undergraduate students for design and engineering careers.
- Developed social media management internal tools using **React & MonogDB** to allow the marketing team to pre-schedule social media posts.

## PROJECTS

**Design Co Websites** | *React, Scss Typescript, Vercel*

Feb. 2024

- Engineered four interactive websites for large scale Design Co events using react, typescript, scss and Vercel.
- Engaged with a design team to refine and implement complex design elements, ensuring a smooth and responsive user interface.

**VR Flight Simulator** | *Unity, C#, OpenXR SDK*

March 2024

- Utilized Unity, and C# to build a flight simulator which allowed players to create custom point-to-point tracks in VR and race to set lap times.
- Ported the application to Windows, and stand-alone VR through the Meta Quest.

**OpenGL Graphical Ray Tracing** | *OpenGL, C++*

Feb 2024

- Programmed an application which rendered ray traced geometry from a text file using the OpenGL library
- Implemented a bounding box acceleration structure to improve rendering times by 2x

**Pantry Pal App Development** | *JavaFX, Whisper API, OpenAI API, DALLE API*

June 2023

- Developed with a team of 6 an AI recipe generation app
- Integrated agile development practices using Github projects to ensure an organized process.

## TECHNICAL SKILLS

**Languages:** Fortran, C#, Java, JavaScript, Python, C, C++, Verilog, Typescript, CSS, HTML, Javascript, REST API

**Frameworks:** React, Node.js, JUnit, WordPress, MRSDK, OpenXR, React Native, Next.js

**Developer Tools:** Git, Docker, MongoDB, VS Code, Unity, Godot

**Courses Completed:** Advanced Data Structures, Systems Programming, Software Tools, Low level programming languages, Statistics, Agile Development, Discrete Math and Algorithms, Computer Graphics, 3D Design and Interaction, Software Security