

# JAY NAKUM

Rajkot, Gujarat, India ♦ +91 94092 59646 ♦ [contact.jaynakum@gmail.com](mailto:contact.jaynakum@gmail.com)

Portfolio Website: [jaynakum.github.io](https://jaynakum.github.io) ♦ LinkedIn: [JayNakum](#) ♦ GitHub: [JayNakum](#)

## PROJECTS

---

### Vector Engine — OpenGL, C++, GLFW

Currently Working

- Developing an open source 3D game engine.
- Engine will support lighting, obj model loading, batch rendering, terrain generation, player movement, collision detection, skybox, animation.

### IIC PDEU — Flutter, REST API

Currently Working

- Currently working on an application for Innovation and Incubation Centre ([IIC](#)), PDEU.
- The app is for managing startups and mentors associated with IIC.

### Out For Delivery — OpenGL, C++, GLFW

[Itch.io](#)

- Developed a 2D game using opengl.
- Implemented shaders, textures, transformations and coordinate systems.

### CPU Scheduling Simulator — Python, Flutter, Firebase, Google Colab, Jupyter Notebook

[GitHub](#)

- Developed a simulator for process scheduling in Flutter.
- Implemented FCFS, SJF, SRTF and RR algorithms in Python.
- Retrieved user input from firebase for scheduling.

### Wave — Java

[GitHub](#)

- Developed a single player game.
- Implemented some calculations for an enemy to follow the player automatically.

### Portfolio — Github Pages, HTML, CSS, JavaScript

[GitHub](#)

- Created a portfolio website hosted via github pages.

### LiViD — Flutter, Firebase, Agora

[GitHub](#)

- Created a live streaming app.
- Implemented agora SDK for live streaming.

### eXPe — Flutter, SQLite

[GitHub](#), [Playstore](#)

- Published a simple expense tracker app.

## SKILLS

---

### Tech

C++, OpenGL, Flutter, Dart,  
REST API, Firebase, SQLite,  
Java, Python, C, SQL, HTML, CSS,  
Android, Graphics Programming, LibGDX

### Developer Tools

Git, GitHub, VS Code, Visual Studio,  
Eclipse, Google Colaboratory, Jupyter Notebook, Android Studio, Canva

### Operating Systems Fields

Linux (Manjaro / Arch), Windows, Android  
Graphics Programming, Flutter Development,  
Data Structures and Algorithms,

### Soft Skills

Research, Deep Learning, Machine Learning  
Problem Solving, Time Management, Teamwork, Leadership,  
Accountability, Communication

## EDUCATION

---

**School of Technology (Pandit Deendayal Energy University)**  
Bachelor of Technology - Computer Science and Engineering - 9.8 CGPA

Gandhinagar, Gujarat  
Aug 2021 - Present

**Shree Amrutlal Veerpal Parekh Technical Institute (Gujarat Technological University)** Rajkot, Gujarat  
Diploma - Computer Engineering - 9.74 CGPA

Aug 2018 - Jun 2021

**Kendriya Vidyalaya (Central Board of Secondary Education)**  
X Grade - 85.6%

Rajkot, Gujarat  
Apr 2008 - Mar 2018

## CERTIFICATIONS

---

- [Flutter and Dart - The Complete Guide - UDEMY](#)
- [SSIP Project Competition](#)
- [JPMorgan SE Virtual Program](#)

## INTERESTS

---

Graphics Programming, Game/Graphics Engine Development, Flutter, Game AI, Game Development, Artificial Intelligence, Machine Learning, Deep Learning, Software Development, Problem Solving

## LANGUAGES KNOWN

---

- English (Full professional proficiency)
- Hindi (Full professional proficiency)
- Gujarati (Native proficiency)
- Japanese (Elementary proficiency)

## HOBBIES

---

- Playing Guitar