# JAY NAKUM

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#### **EXPERIENCE**

# Flutter Intern (Remote)

Jun 2022 - Sept 2022 Rajasthan, India

vigIT Solutions

• Worked in agile software development model.

- Developed and published 2 flutter apps.
- Completion Letter

#### **PROJECTS**

#### Ray Tracer — C++, CUDA

GitHub

- Learning ray tracing and gpu programming in CUDA.
- Implemented different basic materials such as diffuse, metals and dielectrics.

# Happy Face — C++, OpenGL

GitHub

- Developing a scene based opengl renderer, merging all the bits and pieces into one project.
- Implemented shaders, textures, transformations and coordinate systems, lighting, model loading.

# **BitNCrypt** (University Project) — C++

GitHub

- Designed an algorithm based on the similar concepts of hashing.
- It can be used to generate and manage passwords.

# Out For Delivery — C++, OpenGL

GitHub

• Implemented all the basic knowledge of opengl and 2D graphics.

CPU Scheduling Simulator (University Project) — Python, Flutter, Firebase

• A pocket tanks like game where you shoot delivery packages.

GitHub

- Developed a simulator for cpu process scheduling algorithms.
- Implemented algorithms such as FCFS, SJF, SRTF and RR.

# **LiViD** (University Project) — Flutter, Firebase

GitHub

- Developed a live streaming app using Agora SDK.
- This project won 2nd place in SSIP competition for Saurashtra Kutch Region, Gujarat.

# **eXPe** — Flutter, SQLite

GitHub

• Published a simple expense tracker on google playstore.

#### **EDUCATION**

#### Pandit Deendayal Energy University (School of Technology)

Bachelor of Technology - Computer Science and Engineering - 9.85 CGPA

Gandhinagar, Gujarat Aug 2021 - Present

#### A. V. Parekh Technical Institute (Gujarat Technological University)

Diploma - Computer Engineering - 9.74 CGPA

Rajkot, Gujarat Aug 2018 - Jun 2021

# Kendriya Vidyalaya (Central Board of Secondary Education)

Class 1 to 10 - 85.6%

Rajkot, Gujarat Apr 2008 - Mar 2018

# **SKILLS**

Tech C++, OpenGL, GLSL, CUDA, Python, Flutter, Firebase, SQL

Developer Tools Git, GitHub, Visual Studio, VS Code, Android Studio

Operating Systems Linux (Manjaro / Arch), Windows, Android

Fields Computer Graphics, GPU Architectures and Programming, Algorithms, Game Engines

Soft Skills Problem Solving, Time Management, Teamwork, Leadership, Accountability,

Explaining and Teaching, Communication

# AWARDS AND CERTIFICATIONS

• NPTEL: GPU Architectures and Programming

• EDX: UCSD CSE167x: Computer Graphics

• UDEMY: Flutter and Dart - The Complete Guide

• TRINITY, LONDON: Grade 4 - Theory of Music

#### ROLES AND RESPONSIBILITIES

• Technical Head — Computer Society of India, Student Chapter PDEU

• Application Development Lead — Google Developer Students Club, PDEU

• General Secretary — The Hackers Meetup, Student Chapter PDEU

• Application Development Head — Encode, Students Club PDEU

#### LANGUAGES

- English (Professional proficiency)
- Hindi (Professional proficiency)
- Gujarati (Native proficiency)

# HOBBIES AND INTERESTS

Guitar Playing, Music Theory, Singing, Music Composing, Staff Notations, Orchestration, Harmonizing, Voicing, Digital Image Processing, Compiler Designing, Cryptography, Theory of Computation, Mathematics, Learning