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Education

Devang Patel Institute of Advance Technology and Research

Bachelor of Technology in Computer Science and Engineering (CGPA: 8.69)

Anand, Gujarat

Dream International School, Dhoraji

Higher Secondary Certificate (HSC) (89 percentile)

May 2021 Dhoraji, India

May 2025

Experience

Dec 2024 - Present VideoSDK.live

SDK Intern On-site

• working on real-time communication features using Flutter across Android, iOS, and Web platforms.

Contributed to native Android integration, backend scripting in Python, and media pipeline enhancements using MediaSoup and WebRTC.

Charusat University May 2024 - June 2024

Flutter Intern

On-Site

• Assisting in the development of a comprehensive application to manage different committees and clubs on campus.

Facilitating easy management of people and streamlined conduction of events through the application.

Spectrics Solutions May 2023 - June 2023

Flutter Intern

On-site

Developed a video sharing platform to enhance user engagement through short-form content, showcasing various media types.

• Implemented efficient media fetching from the database and optimized display mechanisms to minimize playback delay.

Projects

Cotton Guard | Flutter, Machine Learning, TensorFlow Lite

- Developed a plant disease detection app using deep convolutional neural networks (CNNs), integrated with Flutter via TensorFlow
- Enabled users to upload photos of their plants to diagnose diseases such as curl virus, bacterial blight, fusarium wilt, or confirm plant health.
- Displayed results with confidence scores and provided multi-language support to enhance user accessibility.

MelodyStream | Flutter, FastAPI, PostgreSQL, Hive, Riverpod

- Built a music streaming app inspired by Spotify using the MVVM architecture.
- Developed the frontend with Flutter, connected to a FastAPI backend, and used PostgreSQL for database management.
- Integrated Hive for local data storage and managed state with Riverpod, ensuring smooth app performance.

Picture-in-Picture Mode in Flutter | Flutter, Android/iOS Native, WebRTC, VideoSDK

- Implemented Picture-in-Picture (PiP) mode for video calls using Flutter and VideoSDK.
- Used platform channels to invoke enterPictureInPictureMode() on Android and transformed RTC video frames into AVPlayer-compatible frames for PiP on iOS.
- Enabled seamless switching between full-screen and PiP modes for enhanced multitasking during calls.

Technical Skills

Programming Languages: Dart, Python, Java, JavaScript, C++

Technologies: Flutter, Firebase (Auth, Firestore, Messaging), Supabase, PostgreSQL, FastAPI, Node.js, WebRTC, MediaSoup, CallKeep, PushKit

Concepts: Object-Oriented Programming (OOP), RESTful APIs, State Management (Riverpod, GetX), Real-time Communication, Deep Linking, Platform Channels (MethodChannel), Native Android/iOS Integration, Secure Storage (Hive), Database Management (DBMS), Deep Learning, Neural Networks

Achievements and Certificates

Achievements:

- Coordinated a National-level hackathon.
- Published research paper on Plant Disease Detection using CNN

Certificates:

- Introduction to Android Development (Coursera) 20/03/23
- Flutter & Dart The Complete Guide (Udemy) 18/09/23