

# J ARJUN ANNAMALAI

## Software Engineer

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📍 Chennai, Tamil Nadu, India



### SUMMARY

I'm deeply passionate about cutting-edge technologies to solve intricate challenges. Proficient in Deep Learning, Natural Language Processing, and Mobile Application development with Flutter. I thrive on innovation and collaborative problem-solving. My drive to create transformative solutions fuels my commitment to crafting intuitive Flutter interfaces and seamlessly integrating Firebase for dynamic functionalities. I'm dedicated to pushing the boundaries of technology and achieving impactful results that inspire positive change.

### PROJECTS

#### CalmVerse

Mood-tracking app that uses Case-Based Reasoning (CBR) to provide personalized calming suggestions. The app features an intuitive emoji-based system where users select their emotions using major emojis, followed by related subemojis and mood-specific keywords. Uses AI algorithms like CBR to analyze selected moods to generate suggestions for relaxation and mental well-being. (Currently working on)

#### PrimeOrNot

Created a PrimeOrNot mobile application with AdMob integration, displaying advertisements to users while providing functionality to check whether a given number is prime or not, demonstrating proficiency in monetization strategies within mobile apps.

#### BMI Calculator

Developed a BMI Calculator mobile application using Flutter framework with a simple and intuitive user interface, allowing users to calculate their Body Mass Index easily.

#### Firebase Authentication

Implemented Firebase Authentication in a Login UI, enabling users to log in to the application via Google and Twitter accounts securely.

### PUBLICATIONS

#### Bridging the Semantic Gap: A Deep Learning Framework for Semantic Video Search

<https://ieeexplore.ieee.org/document/10543566>

Multi-Modal Video Retrieval System, integrating Vision Transformer with GPT-2 (ViT-GPT2) architecture and Speech-to-Text (STT) models to extract comprehensive textual descriptions encapsulating visual and auditory elements. Leveraged BERT for semantic understanding, transforming textual descriptions into embeddings for nuanced contextual matching, ultimately enhancing the precision and relevance of video retrieval.

### EDUCATION

#### Bachelor's Degree in Computer Science and Engineering

[SRM Institute of Science and Technology](#)

GPA  
**9.05** / 10

📅 2020 - 2024

📍 Chennai, India

### SKILLS

python	C	C++	Flutter	Dart
HTML	CSS	React.js	node.js	
OOPs	DSA			

### CERTIFICATIONS

The Complete Data Structures and Algorithms Course in Python - Udemy

The Complete Flutter Development Bootcamp with Dart - Udemy

Introduction to Computational Logic - Udemy

Discrete Mathematics - NPTEL Online Certification

### LANGUAGES

English Professional Proficiency

Tamil Native Proficiency

### INTERESTS

Machine Learning, Deep Learning, Software Development, Data Science and Analytics, Game Development, Cloud Computing, AWS