Ullas S Girish

9148948609 | ullas.sgirish@gmail.com | linkedin.com/in/ullas-sg | github.com/UllasSG

EDUCATION

PES University

Bachelor of Technology in Computer Science

Bengaluru, Karnataka

2022 - 2026

10th CBSE-2020	12th CBSE-2022	B-Tech-2026
JSS Public School	JSS Public School	PES UNIVERSITY
89%	95%	8.96 CGPA

Projects

Fuel Expense Tracker | Flutter, Dart, Hive

- Built a cross-platform mobile application using Flutter to monitor and analyze fuel expenses
- Integrated third-party API to fetch real-time fuel prices based on user location
- Implemented secure local data storage using Hive for offline access to transaction history
- Designed interactive charts and visualizations to display monthly expenditure summaries

EmoStream: Concurrent Emoji Broadcast | Kafka, Spark, Flask

- Designed a scalable system to process billions of emoji reactions during live sports events
- Utilized Kafka for queuing and Spark for real-time micro-batch aggregation at 2-second intervals
- Built asynchronous API using Flask to receive emoji POST data from multiple clients simultaneously
- Implemented load testing to simulate thousands of emoji interactions with high concurrency

BasketballBroadcastVision | Python, YOLOv8

- Developed a basketball broadcast analysis tool using YOLOv8 for object detection
- Implemented tracking algorithms to detect and monitor key elements like players, referees, hoop, and basketball
- Enhanced sports video analytics with bounding box tracking and class segmentation
- Optimized model performance for real-time processing of high-definition broadcast footage

3-Factor Authentication | Arduino, RFID

- Designed and implemented a hardware-based multi-factor authentication system using Arduino
- Integrated biometric fingerprint scanning, RFID tag verification, and secure keypad code entry
- Developed firmware to manage authentication processes and security protocols
- Created a layered security system with fail-safe mechanisms to prevent unauthorized access

TECHNICAL SKILLS

Languages: Python, JavaScript, C, SQL, HTML/CSS, Dart

Frameworks: React, Node.js, Flask, Flutter

Developer Tools: Git, Docker, VS Code, Arduino

Libraries & Technologies: Kafka, pandas, NumPy, YOLOv8, Apache Spark, Hive