

# GURUSAIPRASADREDDY

Coimbatore, Tamil Nadu



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Gurusaiprasadreddy



LinkedIn Profile

## EDUCATION

### • Amrita Vishwa Vidyapeetham, Coimbatore

2023 – 2027

B.Tech in Computer Science and Engineering

CGPA: 6.7/10

### • Narayana Junior College, Nellore

2021 – 2023

Intermediate (MPC)

Percentage: 92.1%

### • Ratnam High School, Nellore

2021

SSC

Percentage: 99.67%

## PERSONAL PROJECTS

### • DNA Sequence Matcher (Java, BWT Algorithm)

2024

Genome sequencing tool using Burrows–Wheeler Transform

- Implemented optimized string-matching for large DNA sequences.
- Added mutation detection and reduced algorithmic time complexity from  $O(n^2)$  to  $O(n \log n)$ .

### • Library Management System (C Program)

2023

Console-based book database using C

- Implemented search, sorting, and display features with structured modular coding.

### • Smart Doorbell System (Arduino IoT)

2023

IoT-based doorbell using Arduino UNO

- Built LCD and buzzer-based alert system with embedded C logic.

### • Dynamic Route Recalculation (Java, Dijkstra)

2024

Traffic-aware routing system

- Implemented shortest-path algorithms and Union-Find for real-time updates.

### • Smart Student Guide (React Web App)

2024

Student assistance platform

- Designed responsive UI, used reusable components, state management, and lazy loading.
- Improved performance by 30% with optimized code and modular CSS.

### • All-in-One Payment Website (HTML/CSS/JS)

2024

Payment platform with recharge & bill payment

- Implemented secure UPI/card workflows and multi-service integration.

### • IoT Smart Waste Management System

2025

Real-time waste level monitoring

- Implemented sensor-based waste detection and optimized collection routes.

## TECHNICAL SKILLS AND INTERESTS

**Languages:** C, C++, Java, Python

**Developer Tools:** Git, VS Code, Linux, Eclipse

**Frameworks:** React, HTML, CSS, JavaScript

**Cloud/Databases:** MySQL

**Soft Skills:** Problem Solving, Teamwork, Communication

**Coursework:** DSA, DBMS, OS, Algorithms, Machine Learning

**Areas of Interest:** Software Development, Machine Learning, IoT, Web Development

## ACHIEVEMENTS

### • 160 Days DSA Problem Solving Challenge

GeeksforGeeks

2024

### • Top Performer in Java Bootcamp

CodeClause

2024