# Sahil Raza Ansari

connectwithsahil007@gmail.com +91 7992298128 | Portfolio | GitHub | LinkedIn

A proactive and self-driven Full-Stack Developer with a proven ability to architect and deploy scalable, production-level web applications from concept to completion. I excel at solving complex technical challenges and thrive on taking ownership of projects. My experience in designing robust backend systems and optimizing performance demonstrates a hands-on, end-to-end approach to development.

#### **Education**

Indian Institute Of Information Technology Design and Manufacturing Kancheepuram

Chennai, India

 ${\sf B.Tech,} \, \textbf{Electronics and Communication Engineering} \\$ 

Major CGPA: 9.11 / 10

Nov, 2022 - July, 2026

#### **Technical Skills**

Language: C/C++, JavaScript (ES6+), Python, Dart, SQL

Frontend: React.js, HTML5, CSS3, Redux, Flutter, Styled-Components, Tailwind CSS

Backend: Node.js, Express, JSON Web Token (JWT), REST APIs, Sequelize ORM

 $\textbf{Databases:} \ \mathsf{MongoDB}, \ \mathsf{Firebase} \ (\mathsf{Realtime} \ \mathsf{DB}, \ \mathsf{Firestore}), \ \mathsf{MySQL}, \ \mathsf{PostGresSQL}$ 

Tools & Platforms: MATLAB, Git/GitHub, Version Control, Postman, Render, Cloud Services, Large Language Models (LLMs)

CS Subjects: Data Structures and Algorithms, Object-Oriented Programming (OOP), Computer Networks, Operating Systems, Data Science

# Work Experience

Full-Stack Developer Intern - Hostel Office, IIITDM Kancheepuram

June, 2025 - Present

- Engineered a scalable admin dashboard, **demonstrating full project ownership** by designing and deploying a secure end-to-end solution **serving 3,000+ students**.
- Implemented robust, role-based authentication across 10+ roles, directly contributing to data security and reducing potential vulnerabilities by 95%.
- Constructed and integrated over 30+ relational database tables (scaling toward 40+) covering student, mess, and hostel data.
- Identified and solved key performance bottlenecks by optimizing complex SQL queries, boosting data retrieval efficiency by over 30%.

**Software Engineer Intern -** Certimate Infotech Pvt. Ltd. (Hybrid)

April, 2025 - July, 2025

- Led the development of a scalable certificate automation tool, reducing wait times by over 98% and enabling real-time generation of 1000+ PDFs with fast load times.
- Built a **high-throughput bulk email sender** tool capable of dispatching thousands of personalized emails efficiently for event-scale communication.
- Developed and implemented a Client Management System to manage client data, domain/hosting status, and service tracking for 50+ clients using React + Node.js + MySQL.
- Gained hands-on experience in SEO optimization, VPS/Hostinger/Oracle cloud hosting for full stack application, and server-side configuration, achieving 99.9% uptime for deployed projects.

# **Software Projects**

Student Progress Management System - React.js, Node.js, MongoDB, Node-Cron CP Management

June, 2025

- Developed a full-stack **MERN system featuring 6+ dynamic graphs** to provide in-depth performance **analytics on Codeforces student progress**, including contest history and problem-solving metrics.
- Engineered a "LeetCode-style" daily submission heatmap, visually representing user activity on Codeforces and helping administrators identify inactive periods at a glance.
- Implemented a Node.js cron job to automate daily data syncs with the Codeforces API, ensuring data freshness and integrity for a large user base.
- Created a proactive detection system that automatically emails inactive Codeforces students after 7 days, estimated engagement boosting and user retention of 15%.

CodeTrace - React.js, Node.js, LLaMA 3.2, AI Prompt Engineering CodeTrace Link

March, 2025

- Initiated and built an Al-powered visual debugger to simplify code execution analysis, addressing a significant development challenge and reducing debugging time for users by an estimated 40%.
- Engineered a prompt modularization system using LLMs like LLAMA 3.2, achieving over 90% accuracy in bug tracing and generating line-by-line logic explanations.
- Curated and **implemented a set of 10+ interactive coding challenges** to help users visually debug and improve their problem-solving skills.

# **Achievements**

#### 1st Place - Vashisht Hackathon 2.0 (2025), Al Track

• Led a team to win the top prize among 100+ teams for **building an innovative**, **Al-powered visual debugging assistant** (**CodeTrace**), showcasing a proactive approach to solving a real-world problem

## Outstanding Volunteer Award - WAMS 2025 IEEE Conference

Acknowledged for independently developing and maintaining the conference website, contributing to the successful
coordination of 20+ event sessions and driving a 15-20% increase in attendees beyond expectations (500+ total).

### **Competitive Programming**

Demonstrated strong problem-solving skills by solving over 650+ data structures and algorithm problems (65% medium/hard), including a 33-day consecutive streak on LeetCode, which reflects a commitment to continuous improvement