# Abdur Rahim

+91-7903439339 | abdurrahimer2004@gmail.com | LinkedIn | GitHub | Portfolio | Chennai, India

## Summary

**4th-year CSE student** with a strong interest in **Full Stack Web Development**. Experienced in building end-to-end web applications with responsive user interfaces, secure backend systems, and efficient database management. Proficient in the **MERN stack** and designing scalable **RESTful APIs**.

## Education

**Indian Institute of Information Technology, Design & Manufacturing, Kancheepuram** — **Chennai, India**
*Dual Degree (B.Tech + M.Tech) in Computer Science and Engineering* — *2023 – Present*
- Current CGPA: **8.12 / 10.0**

## Technical Skills

**Languages**: C, C++, JavaScript, TypeScript
**Frontend**: React, Next.js, Tailwind CSS, HTML
**Backend**: Node.js, Express.js, RESTful APIs, WebSockets
**Databases & Storage**: MongoDB, MySQL, PostgreSQL, Redis, Supabase
**Integrations & Tools**: Stripe, Judge0, Cal.com, Git, GitHub, Postman, VS Code, Linux (Ubuntu)
**Relevant Coursework:** Data Structures & Algorithms, OOP, DBMS, Operating Systems, Computer Networks

## Experience

**Freelance Full-Stack Developer** — **Jan 2026 - Present**
*PodGear – E-Commerce & Coach Booking Platform* — *Remote*
- Built a full-stack e-commerce marketplace with an integrated coach-booking system from the ground up using Next.js, TypeScript, and Tailwind CSS.
- Designed the server-side architecture with Node.js and MongoDB, adding a Redis caching layer, OAuth 2.0-based login, and role-based access control.
- Set up Stripe to handle payments end-to-end and used Supabase for scalable image hosting; developed a self-service admin dashboard that eliminated **80%** of manual back-office tasks.

## Projects

**VertexCode – Competitive Coding Platform** | Live Demo | GitHub — **Nov – Dec 2025**
- Developed a full-stack coding platform similar to LeetCode with problem practice, submission history, and global leaderboards.
- Built secure authentication with OTP email verification, password reset, and JWT-based auth with automatic token refresh.
- Integrated **Monaco Editor** and the **Judge0 API** for real-time multi-language code execution and evaluation.
- Implemented Redis-based OTP/token caching and Supabase avatar storage; added Stripe Checkout for Pro subscriptions unlocking editorials.
- **Tech Stack:** React, Tailwind CSS, Express.js, MongoDB, Redis, Supabase, Stripe, Judge0

**Uber-Ride – Ride Hailing Simulation Platform** | GitHub — **Jul – 2026**
- Designed a console-based ride-hailing simulation in **C++** modeling core system-design patterns used in production ride-booking platforms, using only the standard library.
- Implemented city graph modeling with **A* search** for optimal shortest-route computation between pickup and destination locations.
- Built a driver-matching engine performing top-k nearest available driver lookup by vehicle type via a **Vehicle Factory** design pattern (Bike, Auto, Sedan, SUV).
- Designed swappable fare pricing strategies (Normal, Surge, Pool) using the **Strategy pattern**, alongside full ride lifecycle management: request, driver assignment, start, add stop, complete, and cancel.
- **Tech Stack:** C++, STL, OOP Design Patterns (Factory, Strategy)

## Achievements

- Secured Rank 4,548 among 28,000+ participants in LeetCode Weekly Contest 483.
- Solved **700+ Data Structures and Algorithms problems** on LeetCode, Strike and GeeksforGeeks.
- Qualified **JEE Advanced and JEE Mains**.