

# PRAJAN KARTHIK

Chennai, Tamil Nadu, India

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## Education

### Amrita Vishwa Vidyapeetham, Coimbatore

B.Tech in Computer Science and Engineering (CGPA: 8.65)

2023 – 2027

Tamil Nadu, India

### Srimathi Sundravalli Memorial School

Class XII (Percentage: 482/500)

2022 – 2023

Tamil Nadu, India

## Skills

**Languages:** C, C++, Python, JavaScript, HTML, CSS

**Frameworks & Libraries:** React, Node.js, Express, Tailwind CSS, BootStrap CSS

**Developer Tools:** Git, GitHub, Docker, Visual Studio Code

**Databases:** MySQL, MongoDB, PostgreSQL

## Projects

### E-Commerce Website | MongoDB, React, Node.js, Express, Render

- Developed a full-stack e-commerce platform with product catalog, authentication, and cart management features.
- Built a responsive frontend using React with Chakra UI for modern, reusable components.
- Designed and implemented backend services with Express.js and MongoDB, enabling persistent data storage.
- Deployed both frontend and backend on Render for reliable cloud hosting.

### Finance Tracker App | React Native, PostgreSQL, Redis, Clerk, Render

- Developed a cross-platform mobile application for personal finance tracking with categorized expenses and history visualization.
- Implemented secure authentication using Clerk and applied Redis-based rate limiting to manage request flow.
- Deployed backend services with PostgreSQL database on Render, ensuring persistent and reliable data storage.
- Designed intuitive mobile UI in React Native with offline-first support.

### Video Game Purchase and Recommendation App | Python, DSA (AVL Tree, Graph, Heap, Trie)

- Designed a game search and recommendation system simulating a Steam-like library.
- Contributed optimized algorithm implementations with detailed time complexity analysis.
- Implemented a Trie Data Structure and integrated it into the search functionality for game titles.

### Arduino Car Project | C++

- Designed and programmed a Bluetooth-controlled Arduino car using C++ concepts such as pointers, structures, arrays, and functions.
- Implemented modular motor and sensor control for directional movement and obstacle avoidance.
- Focused on structured, reusable C++ code for hardware-level programming.

## Experience

### Intel IoT Club

Coimbatore

Lead Web Developer

Nov 2025 – Present

- Spearheading the development of **Jobify**, a dedicated job search platform, overseeing the full-stack architecture and implementation.
- Leading the web team by conducting code reviews, mentoring contributors, and coordinating collaborative feature delivery.

### MERN DevOps

Jun 2025 – Oct 2025

- Secured the club's website by implementing a patching a critical authentication bypass vulnerability in the admin panel and performed routine health checks.

## Certifications

- CyberSecurity Professional Certificate** – Coursera(Google)
- Ethical Hacking** – NPTEL(IIT Kharagpur)
- The Web Developer Bootcamp** – Udemy
- Python, SQL** – HackerRank