

# Nikhil P John

Portfolio: [nikhilpj.dev](https://nikhilpj.dev)

Email: [contact@nikhilpj.dev](mailto:contact@nikhilpj.dev)

Mobile: +91 9483707761

[GitHub](#) — [LinkedIn](#) — [LeetCode](#)

## EDUCATION

- **Rajagiri School of Engineering and Technology (RSET)** Kerala, India  
*Bachelor of Technology in Computer Science and Business Systems CGPA: 8.78* Aug 2024 – Jun 2028
- **St. Francis School ICSE** Bengaluru, Karnataka  
*ICSE (Grade 10)* 94% 2022
- **Geetanjali Olympiad School** Bengaluru, Karnataka  
*CBSE (Grade 12)* 88% 2024

## TECHNICAL SKILLS

- **Programming Languages:** C++, Python, C, Java (basic), SQL, HTML, CSS, JavaScript, Bash
- **Frameworks & Libraries:** OpenCV, NumPy, React, Node.js, Express, aiohttp, asyncio
- **Databases & Analytics:** MySQL, Power BI, Microsoft Excel
- **Tools & Platforms:** Git, GitHub, Linux, Windows, Netlify, Render
- **Core Concepts:** Computer Vision, Artificial Intelligence, Data Structures & Algorithms, Database Management, Operating Systems, Computer Networks
- **Areas of Interest:** Systems Programming, Cybersecurity, Computer Vision, Reverse Engineering, Competitive Programming

## EXPERIENCE

- **AIBI** Kerala, India  
*Data Analytics Intern* 2025
  - Worked with relational databases using **MySQL** to query, organize, and analyze structured datasets.
  - Built dashboards and reports using **Power BI** and **Microsoft Excel** for data visualization and business insights.
  - Performed data cleaning, transformation, reporting, and documentation while collaborating with mentors on analytical workflows.

## PROJECTS

- **OpenPark: Python, OpenCV:** Developed a real-time parking occupancy detection system using computer vision techniques. Implemented perspective transformation, region-based occupancy analysis, configurable parking layouts, and live visualization to accurately detect vacant and occupied parking spaces from video streams while maintaining low computational overhead.
- **Teacher Connect: React, Node.js, Express:** Built a full-stack educational collaboration platform enabling teachers and students across institutions to share resources and communicate. Deployed the frontend on Netlify and backend on Render.
- **Portal Security Testing Tool: Python, aiohttp, asyncio:** Developed an asynchronous security testing utility to evaluate authentication rate limiting and login security, reducing testing time from approximately 20 minutes to under 3 seconds while following responsible disclosure practices.
- **Console and Embedded Device Modding — RGH 3.0, Hardware Debugging:** Performed advanced hardware and software modifications including Xbox 360 RGH 3.0 installations (Corona and Trinity), Wii softmodding, NAND flashing, hardware fault diagnosis, and embedded system recovery.

## ACHIEVEMENTS

- **3rd Place – Exodus (Cybersecurity & Debugging Challenge):** Secured 3rd place among 100+ participants by solving encryption and debugging challenges.
- **Competitive Programming:** Solved 70+ LeetCode problems and actively participate on Codeforces (Rating: 719).
- **Hackathons:** Participated in sponsored hackathons and developed the Teacher Connect platform.

## ADDITIONAL INFORMATION

- **Soft Skills:** Analytical thinking, problem solving, debugging, technical documentation, collaborative development.
- **Interests:** Computer Vision, Systems Programming, Cybersecurity, Reverse Engineering, Embedded Systems, Competitive Programming.