# Nithish kumar B

Portfolio | LinkedIn | GitHub | Leetcode

**Location:** Coimbatore, Tamil Nadu, India **Email:** nithiishkumarb@gmail.com | **Mobile:** +91 9597972759

#### **SOFTWARE ENGINEER**

Passionate **Software Engineer** with a strong background in **web development** and **IoT solutions**, specializing in **MERN stack** & **ThingsBoard IoT platform**. Proven success in delivering scalable systems, such as a custom IoT solution that enhanced operational efficiency. Adept at collaborating with teams and delivering innovative user-focused solutions.

## **TECHNICAL SKILLS**

Languages : HTML, CSS, JavaScript, Typescript
Frameworks : Next JS, Node.JS, Express JS

**Libraries** : React.JS, Material UI, Redux, React Router,

**Databases** : MongoDB, PostgreSQL

IoT Technologies: Raspberry PI, ThingsBoard, Telegraf, MQTT, HTTP, Modbus

Others : Docker, Git, GitHub, REST API

# **EXPERIENCE**

# **Software Engineer**

Yavar Tech works Pvt Ltd.

May 2024 - Present

Coimbatore, Tamil Nadu, India

• Developed end-to-end **IoT solutions** using **MERN stack**, integrating **ThingsBoard** for device management and real-time visualization.

- Designed interactive dashboards, enhancing telemetry monitoring and decision-making processes.
- Optimized system performance by integrating third-party platforms, boosting scalability.
- Key Achievement: Enhanced operational efficiency by 25% with a custom monitoring solution.

#### **Graduate Engineer Trainee / Intern**

Aug 2022 - May 2024

Netcon Technology India Pvt Ltd.

Chennai, Tamil Nadu, India

- Analyzed client requirements and developed tailored **IoT solutions**, preparing detailed solution documentation.
- Developed prototype IoT applications for client presentations, contributing to a 20% increase in engagement & interest.
- Streamlined solution designs, improving communication of technical concepts.
- Researched emerging **IoT technologies**, enhancing solution relevance and innovation.

# **EDUCATION**

## **Electronics and Communication Engineering**

KPR Institute of Engineering and Technology

Coimbatore, Tamil Nadu, India

June 2019 – may 2023

**PROJECTS** 

### **Connected Care - Cisco Innovation Challenge 2024**

React JS, Thingsboard, PostgreSQL, IoT sensors

- Developed an IoT-based system to monitor elders in care homes, utilizing sensors, Cameras and AI for real-time
  monitoring.
- Implemented key features like fall detection, gesture recognition for help, and vital sign monitoring for enhanced elder care.
- Integrated ThingsBoard for seamless IoT device management, data visualization, and alert generation.
- Designed an user interface to display real-time health metrics, Real time monitoring and emergency alerts etc.
- Recognized with APJC Special Mention in the Cisco Innovation Challenge 2024 for innovative and impactful
  design.

- Developed a system to track vehicle duration in manufacturing bays using **RFID**, ensuring accurate tracking data.
- Created a responsive and user-friendly real-time dashboard to visualize vehicle movement and status.
- Designed and implemented Restful API for seamless communication between the front-end and back-end.
- Optimized backend APIs, reducing response times by 25% and improving overall system efficiency.
- Ensured data integrity and reliability through database constraints, indexing, and best practices in data management.

# **ESG Monitoring System**

React JS, Thingsboard, Telegraf, Modbus, Sensors

- Developed and deployed a real-time ESG monitoring system to monitor energy usage across **distributed loads**, water usage, temperature & humidity, and air quality.
- Integrated ThingsBoard and Telegraf for IoT device management, data visualization, and **real-time alerting** to improve sustainability efforts.
- Created an interactive dashboard to offer actionable insights, trend analysis, and compliance reporting.
- Improved energy efficiency through tracking distributed loads, recognizing consumption habits, and facilitating data-based decision-making.
- Increased operational sustainability through **automatic alerts**, maintaining proactive environmental parameter management.

# **Intelligent Test System**

React JS, Node JS, Express JS, PostgreSQL, Rclone

- Developed a real-time monitoring system for testing machines, extracting and processing CSV data updated every second.
- Built a user-friendly interface, visualizing over **500+ data points** per minute in real-time.
- Integrated Rclone to copy data from shared folders, ensuring 99.9% data synchronization without downtime.
- Designed and implemented 5+ backend API's using **Node.JS** & **Express.JS** for seamless data extraction and monitoring.
- Utilized PostgreSQL to store and retrieve 50,000+ test records, ensuring high performance and scalability.

# **CERTIFICATIONS**

- React certified developer
- FreeCodeCamp Back End Development And API's
- Cisco JavaScript Essentials