

VAIBHAV UGALE

✉ uglevaibhav00@gmail.com | +91 9370141891

New Mumbai , India

www.linkedin.com/in/vaibhavugale-959aa2217

<https://github.com/vaibhavugale>

<https://vaibhavugale.thesudoer.in>

Skills:

Frontend : JavaScript, TypeScript, React JS, React Native, Next JS, React Hooks, Redux, RTK, tailwind, MUI

Backend : Node.js, Express JS, REST APIs, API Design, NGINX, Mongo, SQL, neo4j

Other : Problem solving, Data Structure And Algorithms, Version Control

Experience:

Emertech innovations – Frontend Engineer (Aug-2024 - present)

BKT tyres:

- BKT-Trace-App
 - Built an **internal traceability system** to track tyre components, mapping which and how many compounds were used in each tyre.
 - Integrated with **infrared PSC scanners** to enable QR code scanning with minimal manual interaction.
 - Developed a **QR code generation module** to produce printable output, integrated with **industrial scanners** for physical output.
 - Implemented a **secure login system** and an **APK auto-update feature** for closed-premise deployment environments.
 - Engineered the system to handle **40,000+ QR prints and scans per day**, ensuring high performance and reliability.
- Dynamic JSON-Driven Template Renderer.
 - Engineered a dynamic, JSON-driven template system in ReactJS to render complex, nested UI structures .
 - Developed dynamic, **data-driven user interfaces** by parsing and rendering JSON data.
 - Designed responsive, scalable UI layouts in **Figma** aligned with product and branding guidelines.

Apollo tyres:

- EUDR Compliance platform.
 - Build Email reminder feature
 - Developed responsive, pixel-perfect UI based on Figma mockups.

Emertech innovations:

- EUDR-Compliant Land-Mapping & Deforestation-Monitoring Platform.
 - Built a complete React Native app for farm/plot mapping and compliance tracking.
 - Implemented **2-step verification** for secure user access.
 - Enabled farm/plot creation via polygon mapping with **auto-generated GeoJSON and KML files**.
 - Built algorithm to auto-calculate polygon area in square meters.
 - Developed **point-in-polygon algorithm** for plot overlay validation.

ADEG :

Dispatch Module – Inventory Tracking System .

- Developed the frontend for the dispatch module using ReactJS and TypeScript.
- Integrated QR and barcode scanning for fast, accurate dispatch data capture.
- Implemented **real-time dashboard updates** using **WebSockets**, reflecting scanning activity instantly.
- Enabled end-to-end traceability of dispatched goods back to individual farmers.

Education:

Smt. Kashibai Navale College of Engineering , Pune - 2020-24

B.E (Computer Engineering)