THUSHAN MALAKA RANASINGHE

in LinkedIn | 📱+94 717886186 | 🌐Thushan | ✉ thushanmalaka123@gmail.com | 🔗 GitHub

Profile

Full-stack developer with hands-on experience in building scalable web and mobile applications using React, NestJS, PostgreSQL and Firebase. Skilled in designing RESTful APIs, implementing secure authentication (JWT, Azure AD) and deploying applications on cloud platforms. Strong problem-solving ability with a background in Computer Engineering and experience delivering production-ready systems during internship at Sri Lanka Telecom.

Skills

- **Programming Languages**: Python, Java, C++, JavaScript, TypeScript
- **Web & Frameworks**: React, Node.js, Express, Next.js, React Native, TailwindCSS
- **Databases**: PostgreSQL, MySQL, MongoDB, SQLite
- **Tools & Methodologies:** Git, GitHub, Jira, Agile, TypeORM, Firebase
- **Other:** RESTful APIs, JWT Authentication, Azure AD

Work Experience

- **Software Engineering Intern - Sri Lanka Telecom (SLT)**
  Mar 2025 – Sep 2025
  - Designed a custom Service Desk system (sDesk) using React, NestJS and PostgreSQL.
  - Integrated Microsoft Azure Active Directory for secure authentication and user synchronization.
  - Developed real-time incident broadcasting using Socket.IO, improving technician response times.
  - Collaborated with cross-functional teams under Agile methodology using Git and Jira for version control and tracking.
  - Enhanced system reliability by applying best practices in RESTful API design and database optimization.

Education

- **Bachelor of the Science of Engineering (BSc Eng) in Computer Engineering**
  Apr 2021 – Nov 2025

Projects

- **TMchat** 🔗 :
  - Built a real-time chat application using MongoDB, Express, React (Vite) and Node.js with Socket.io for instant messaging.
  - Implemented secure JWT + secure-cookie authentication, protected routes, rate limiting and bot protection (Arcjet).
  - User features: profile management with Cloudinary avatars, online presence, and email notifications (Resend/Nodemailer).
  - Frontend: responsive dark-themed UI using TailwindCSS + DaisyUI, Zustand for state, Axios for API calls.

    Key Technologies : Node, Express, MongoDB, Socket.io, JWT, Cloudinary, Arcjet, Nodemailer, React, Vite, TailwindCSS, DaisyUI

- **Task Manager** 🔗 :
  - Built a modular task management backend using NestJS, TypeScript, and PostgreSQL.
  - Implemented REST APIs with JWT authentication and role-based access control.
  - Integrated TypeORM for database modeling and migrations.
  - Designed the system for seamless consumption by a React frontend.
  - Deployed using Render, Vercel, and Neon.

    Key Technologies : NestJS, TypeScript, PostgreSQL, TypeORM, React, JWT, Render, Vercel, Neon

- **Lab Booking System** 🔗 :
  - Built a complete lab reservation system using the MERN stack.
  - Developed RESTful APIs with JWT-based authentication and session handling.
  - Implemented role-based access and real-time updates for bookings.
  - Created a responsive, user-friendly frontend with React..

    Key Technologies : MERN stack (MongoDB, Express.js, React.js, Node.js), JWT, REST APIs

- **Tasklet** 👓 :
  - Developed a productivity mobile app using React Native, Expo, and TypeScript.
  - Implemented shopping lists, task countdown timers, and idea notes with persistent AsyncStorage.
  - Added haptic feedback, confetti animations, and push notifications.
  - Used date-fns for clean date formatting and improved UX.

    Key Technologies : React Native, Expo, TypeScript, AsyncStorage, date-fns, push notifications, haptics

- **sDesk** :
  - Built a full-stack service desk system during internship at SLT.
  - Integrated Microsoft Azure AD for secure enterprise authentication.
  - Developed incident, user, and technician management modules using NestJS and PostgreSQL.
  - Implemented real-time updates via Socket.IO and a modern React frontend.

    Key Technologies : React, NestJS, PostgreSQL, Azure AD, Socket.IO

- **Beat Music** 👓 :
  - Created a music platform using Next.js, React, TypeScript, and TailwindCSS.
  - Implemented Firebase Authentication with email/password and Google sign-in.
  - Built a lyric-aware music player with playlists and sample releases.
  - Designed a clean, responsive UI for smooth user experience.

    Key Technologies : Next.js, React, TypeScript, TailwindCSS, Firebase Authentication

Certifications and Awards

- **Python Data Structures (Sep 2020)**
- **Google IT Support (Nov 2020)**
- **Introduction to Web Development (Aug 2020)**
- **React Native (Jun 2025)**

- **IEEE Xtreme 17.0 (Oct 2023)**
- **IEEE Xtreme 16.0 (Oct 2022)**

Soft Skills

- Problem-Solving & Critical Thinking.
- Team Collaboration & Communication.
- Leadership & Mentorship.
- Adaptability & Continuous Learning.
- Time Management & Prioritization.

References

Dr. (Mrs.) J. Jananie
Senior Lecturer Grade II
Department of Computer Engineering,
Faculty of Engineering,
University of Jaffna
jananie@eng.jfn.ac.lk / +94 704904957

Mr. Y. Pirunthapan,
Lecturer,
Department of Computer Engineering,
Faculty of Engineering,
University of Jaffna
pirunthapany@eng.jfn.ac.lk