Kalaiyarasan S

FrontEnd Engineer

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EXPERIENCE

Software Engineer   Sep 2022 – Present
Tata Consultancy Services   *Bangalore*

- Lead Frontend Developer in team for digital banking application for the client
- Implemented SOLID, DRY,COI and SOC design principles to create a modular, reusable, and maintainable codebase that effectively separates concerns
- Designed and Architected Scalable, efficient web app solution, ensuring best practices in code structure and performance optimization.
- Utilized Redux for state management, ensuring predictable state transitions and efficient data flow throughout the application
- Developed robust, responsive user interfaces using React.JS, focusing on creating reusable components that enhance efficiency
- Adeptly implemented comprehensive solutions that bridged the gap between client and server, fostering a cohesive and responsive application environment
- Designed,Created and managed database schemas based on ACID, written efficient SQL queries and stored procedures that optimize performance

PROJECTS

Simulation | *Matlab*   June 2020 – 2021

- Design of ultra capacitor charge controller using SEPIC ZETA CONVERTER FOR GRID TIED EV SYSTEM
- Designed and simulated a high-efficiency DC-DC SEPIC-Zeta converter integrated with an ultracapacitor system for renewable energy applications
- Implemented MPPT and PWM techniques to minimize switching losses and enhance conversion efficiency.
- Developed a MATLAB Simulink and PSPICE-based model to validate bidirectional energy flow (ZVT Buck/Boost modes) with low harmonic distortion for grid integration via a single-phase inverter.

EDUCATION

Dhirajlal Gandhi college of Technology   Salem
Bachelor of Engineering-EEE- CGPA:7.6   *Jun. 2017 – Jun 2021*

CERTIFICATIONS

Udemy: FullStack Web Development BootCamp

TECHNICAL SKILLS

Languages: C/C++, SQL, JavaScript, HTML/CSS
Frameworks: React
Developer Tools: Git,VS Code, Visual Studio, Linux
Libraries: Redux, TailWind CSS, BootStrap