SIDDAROOD
KARACHURI

+91 8123001085

Bengaluru,Karnataka|siddarthinme@gmail.com

Versatile and results-driven Software Developer with 3+ years of experience in Windows Forms Application Development, Full Stack Java Development, and Embedded Systems. Proficient in building real-time monitoring tools, simulators, and data visualization applications for aerospace and industrial domains. Skilled in C# (.NET Framework), Java, React JS, Docker, and Kubernetes. Demonstrated success in delivering mission-critical projects for organizations like ADA and Wartsila, with a strong focus on performance optimization, usability, and maintainability. A collaborative team player with a passion for innovation, system integration, and high-quality software delivery.

EXPERIENCE

WINDOWS FORMS APPLICATION DEVELOPER

Client – Aeronautical Development Agency (ADA), Bangalore | L&T Technology Services

JAN 2024 – CURRENT

- Designed and developed Windows Forms applications using .NET Framework 4 and C#, streamlining avionics test workflows and improving UI responsiveness.
- Developed RT simulator and bus monitoring tools using DDC EMACEBU69092 ACExtreme C# SDK, enabling real-time observation and analysis of 1553B Remote Terminals.
- Created a multi-tab RT monitoring application with automated message logging, enhancing debugging and post-mission analysis capabilities.
- Built a graph plotting tool to visualize VDR (Voice and Data Recorder) data from 1553B bus logs, improving data interpretation for flight test engineers.
- Engineered a real-time bit status monitoring tool to dynamically visualize bit states from multiple .dat files, with folder-based navigation and selection support.
- Developed a utility suite in WinForms including checksum calculator, VDR analyzer, automated letter generator, and 1553 signal plotter, reducing manual effort and increasing productivity.
- Created an Ethernet-based chat and file-sharing application for office LAN use, enabling real-time communication without internet dependency.
- Used ASTRA RT Simulator for validation of avionics and SMS software, ensuring system stability and accuracy under various test conditions.
- Performed unit testing using LDRA tool for ADA95-based modules, writing and validating test cases in compliance with DO-178C standards.
- Supported flight test teams with real-time monitoring, post-flight data analysis, and automated test report generation, improving turnaround time and accuracy.
- Prepared technical documentation including SDD (Software Design Document), FRS, and SRS, aligning with aerospace software development standards.
- Managed version control using Git and collaborated with team members for seamless code integration and project tracking.

FULL STACK JAVA DEVELOPER

Client – WARTSILA, Vadodara | L&T Technology Services

JULY 2022 – DEC 2023

- Developed responsive user interfaces using React JS and Java Play Framework, enhancing application performance and user engagement.
- Built dynamic front-end components using HTML, CSS, JavaScript, and Material UI for seamless user experiences.
- Implemented scalable Java-based microservices and optimized MySQL queries to boost backend efficiency and security.
- Containerized applications using Docker and deployed microservices on Kubernetes clusters, improving scalability and fault tolerance.
- Configured Kubernetes Deployments, Services, and Namespaces for environment-specific isolation and high availability.
- Applied virtualization techniques and hypervisors to manage isolated development and testing environments, optimizing resource usage.
- Used Swagger for documenting RESTful APIs and Postman for testing, ensuring integration reliability.
- Collaborated with teams through GitHub for version control and used Jira for project tracking and workflow management.
- Conducted unit testing to verify system functionality and enhance software stability.

ENGINEER TRAINEE

Client – BOSE, Mysuru | L&T Technology Services

NOV 2021 – JUN 2022

- Developed embedded C applications for validating device driver functionality using JTAG, I2C, and SPI interfaces, ensuring accurate hardware design and system reliability.
- Worked on embedded driver development, microcontroller programming, and software testing in alignment with SDLC practices.
- Simulated CAN networks using CANoe and authored CAPL scripts for bus communication and diagnostics. Contributed to platform porting and functionality enhancement for multiple vehicle models, resolving issues tracked via Jira.
- Utilized tools such as Serial Downloader, A2B Analyzer, TortoiseSVN, Understand Tool, and Notepad++ to improve development workflows.
- Gained beginner-level exposure to Classic AUTOSAR concepts and architecture. Conducted debugging and root cause analysis for hardware-software integration issues, improving performance and stability of embedded systems.

TRAINING AND CERTIFICATION

- The complete 2023 web development bootcamp – Udemy
- Master Java, Spring 6 and Spring Boot 3 with JDBC, JPA, Security, Docker and Microservices with Telusko
- Model Based Design (Model, Software, Hardware in Loop)
- C Programming on Multiple Approach – PBL Platform

LANGUAGES

- ENGLISH   -   Professional Working Proficiency
- KANNADA   -   Native or Bilingual Proficiency
- HINDI   -   Professional Working Proficiency

SKILLS

Development & Testing

- C# (Windows Forms – .NET Framework 4), Java (Spring, Play Framework), JavaScript, React JS, HTML, CSS, Material UI
- RESTful API Development, Swagger, Postman, JUnit, Mockito, Integration Testing
- Agile (Jira), Git, GitHub, GitHub Actions, Jenkins (CI/CD basics), Unit Testing
- Python & Shell Scripting, Notepad++, TortoiseSVN, Understand Tool

Embedded Systems

- Embedded C Programming, Microcontrollers (STM32), RTOS
- Driver Validation (JTAG, I2C, SPI), Signal & A2B Analyzers
- CAN Network Simulation (CANoe, CAPL scripting), SDLC Process
- Classic AUTOSAR (Beginner Level)

DevOps, Database & Cloud

- Docker, Kubernetes, Virtualization & Hypervisor Setup
- MySQL, MS SQL, CI/CD Pipelines (Basics), Software Deployment

EDUCATION

BACHELOR OF ENGINEERING (Electrical and Electronics Engineering)

BMS Institute of Technology and Management, Bengaluru, Karnataka

Oct 2021 | CGPA: 7.84

DIPLOMA IN ENGINEERING (Electrical and Electronics Engineering)

The Oxford Polytechnic, Bengaluru, Karnataka

Jul 2018 | Percentage: 79.33%

PUC (Pre-University Course)

Marimallappa PU College, Mysuru, Karnataka

May 2016 | Percentage: 65.83%

SSLC (Secondary School Leaving Certificate)

Athani Vidyavardhak High School, Athani, Karnataka

Mar 2013 | Percentage: 72.48%

INTERESTS

Cycling   Photography   Trekking   Reading Books

DECLARATION

I, Siddarood, hereby declare that the information provided in this resume is true and accurate to the best of my knowledge. I consent to its use for evaluating my suitability for employment and authorize necessary verifications.