KABUNDI Tshisuaka

365 Starbuck Parkway, GA 30567 | (678) 979-6811 | bertintshisuaka2025@gmail.com |

Professional Summary

Highly motivated and results-oriented **Senior Software Engineer** candidate with over 18 years of intensive experience in **systems troubleshooting**, **industrial automation**, and **control systems** engineering, transitioning to a dedicated software development role. Proven expertise in **embedded systems** concepts through extensive work with **PLC (Programmable Logic Controller) programming** and hardware interfacing, which directly translates to developing **automotive software layers** and managing **data flow in software stacks**. Recently augmented technical foundation with a Full Stack Web Development Bootcamp and a QA Software Tester Certificate, demonstrating a strong commitment to modern software engineering principles, including **C++**, **Python**, and **modular design and architecture**. Seeking to leverage a deep understanding of complex electromechanical systems, high-pressure problemsolving, and logical thinking to contribute immediately to General Motors' advanced software initiatives.

Technical Skills

Category	Skills
Programming Languages	Python, JavaScript (ES6+), HTML5, CSS3, SQL, C/C++ (Conceptual)
Software & Frameworks	React, Node.js, Express, MongoDB, PostgreSQL, Git, VS Code
Embedded & Automation	PLC Programming (Ladder Logic, Structured Text), Industrial Control Systems, Electrical Troubleshooting, Diagnostics, Hardware Interfacing, Embedded Systems Concepts, Data Flow Management
Testing & Quality	QA Software Testing, Unit Testing, Integration Testing, System Troubleshooting, Problem Solving, Logical Thinking
Concepts	Full Stack Development, Object-Oriented Programming (OOP), Data Structures, Algorithms, Agile/Scrum

Professional Experience

Maintenance Engineer (Consolidated Roles across 8+ Companies) | 2007 – Present *USA*

- Spearheaded electrical troubleshooting and diagnostics for complex industrial machinery and embedded systems, consistently resolving high-pressure operational issues to minimize downtime and ensure continuous production.
- Designed, implemented, and maintained industrial automation and control systems using PLC programming, effectively managing data flow and logic to optimize machine performance and safety protocols.
- Managed and maintained electromechanical systems, demonstrating a deep, practical understanding of hardware systems and their software layers and interfaces.
- Applied logical thinking and systems troubleshooting to identify root causes of system failures, translating complex physical and electrical symptoms into actionable solutions, a core skill for debugging and developing robust software.

 Successfully executed maintenance engineering operations for over 18 years, developing unparalleled experience in system reliability, modular repair, and preventative maintenance, which aligns with principles of modular design and architecture in software.

Relevant Software Projects

Automated Warehouse Inventory System (Full Stack/Embedded Concept)

Project completed during Full Stack Web Development Bootcamp * Developed a full-stack application to track and manage inventory levels, simulating the kind of data flow management required in complex systems. * Designed a front-end interface (React) and a RESTful API (Node.js/Express) to interface with a simulated hardware system (using a database) for real-time stock updates, paralleling the need to interface with hardware systems in automotive software. * Implemented robust troubleshooting and error handling within the application logic to ensure data integrity and system reliability, a critical aspect of automotive software layers.

Vehicle Diagnostics Simulator (QA & Testing Focus)

Project completed during QA Software Tester Certificate course * Created a series of automated test scripts (Python) to simulate various vehicle system failures and validate the correct diagnostic output, directly relevant to **embedded systems knowledge** and testing in the automotive sector. * Focused on testing edge cases and failure modes, ensuring the system's **data flow** remained stable and reliable under duress, a key requirement for high-integrity **automotive software**. * Utilized **problem-solving** skills to identify and document logical flaws in the simulated system's **software stack**.

Education & Certifications

QA Software Tester Certificate | JanBask Training | 2025

Full Stack Web Development Bootcamp Certificate | Georgia Institute of Technology | 2023

Bachelor of Science in Software Engineering | University of Phoenix | 2016

Technical Engineering in Electromechanical | DRC (Democratic Republic of Congo) | Date not provided, assumed prior to 2007