

# LASSANA BILITY

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## PROFESSIONAL SUMMARY

Full Stack Developer and Cybersecurity Engineer with production experience building scalable systems and 25,000+ lines of Python code. Expertise in designing event-driven architectures, MongoDB database systems with 60+ collections, and integrating AI/ML technologies. Proven track record in IT support, system development, and deploying secure applications. Skilled in building automated CI/CD pipelines, comprehensive test suites, and performance-optimized solutions.

## TECHNICAL SKILLS

**Languages:** Python 3 (Advanced), JavaScript, TypeScript, Go, SQL, Bash

**Databases:** MongoDB/PyMongo, MySQL, PostgreSQL, SQLite, NoSQL Design, Query Optimization, Indexing

**Backend:** Node.js, Express, Django, REST APIs, WebSocket Servers, Async/Await, Threading

**Frontend:** React, HTML5, CSS3, Tailwind CSS

**AI/ML:** LLM API Integration (Claude, Ollama), TensorFlow, PyTorch, Scikit-learn, Context Management

**Architecture:** Event-Driven Systems, Microservices, Pub/Sub Messaging, Design Patterns (Factory, Observer, Strategy, Adapter)

**DevOps:** CI/CD Pipelines, Docker, AWS (EC2, S3, Lambda), Vercel, Render, Git, Automated Testing

**Security:** Wireshark, Nmap, Burp Suite, Snort/Suricata, Wazuh, Network Monitoring, IDS/IPS, Vulnerability Assessment

## PROFESSIONAL EXPERIENCE

### IT Support Technician

Tame Cooperation | Liberia, Africa | SchoolMass System

- Provided first-line technical support for SchoolMass educational management system, troubleshooting and resolving issues before escalation to senior engineers
- Diagnosed and resolved hardware, software, and network issues for end users, maintaining system uptime and user productivity
- Documented technical issues and solutions, creating knowledge base for common problems and reducing resolution time
- Collaborated with engineering team to identify system improvements and communicate user feedback for product enhancement

## EDUCATION

### Bachelor of Science in Information Technology & Cybersecurity Engineering

University of Detroit Mercy | Detroit, MI | Expected 2025

### Associate of Science in Computer Science

Delaware County Community College | Media, PA

## TECHNICAL PROJECTS

### Autonomous Backend System with AI Integration

Python, MongoDB, REST APIs, WebSocket, LLM Integration

- Developed 25,000+ lines of production Python code implementing complex event-driven architecture with 9 modular subsystems
- Designed MongoDB database architecture with 63 collections, optimized queries with indexing, and aggregation pipelines
- Built hybrid AI system integrating Claude API and local Ollama models with automatic fallback and context management
- Implemented WebSocket server for real-time bidirectional communication with JSON protocol design
- Created comprehensive test suite (50+ test files) and automated CI/CD pipeline with zero-downtime deployment

### Enterprise Inventory Management System

Full Stack Application | Oil & Gas Industry

- Built complete inventory tracking system for oil and gas company managing equipment, supplies, and asset lifecycle
- Implemented real-time stock tracking, automated reorder notifications, and reporting dashboards

## **Food Distribution Management System**

React, Node.js, Express, MySQL | Deployed on Vercel/Render

- Architected full-stack application coordinating food donations between restaurants, pantries, and NGOs
- Implemented role-based access control (RBAC) with secure authentication for multiple user types
- Built real-time donation tracking with automated status updates and deployed with distributed architecture

## **Network Threat Detection System**

Python, Machine Learning, Security Tools

- Developed ML-powered intrusion detection system using CICIDS2017 dataset with signature and behavior-based detection
- Created threat intelligence dashboard with real-time visualization and automated alerting