

JONATHAN ROETS

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Summary

I have over two years of experience in IT support, but I don't just fix systems I build them. I've engineered my own custom solutions from scratch, including a full-stack Python/Flask ERP and IoT hardware prototypes. Right now, I'm channeling that drive into mastering backend architecture, actively pursuing my Oracle SQL and CompTIA Network+ certifications to specialize in data and security.

Skills

- SQL
- C#
- C++
- Databases
- Business Communications
- Point of Sale (POS)
- Support Mobile Device Configuration
- Tier 1 Technical Support
- Data Integrity & Management
- Office Hardware Maintenance
- Networking Software Development
- Web Development
- Information Systems
- JavaScript, Cascading Style Sheets (CSS), HTML5
- Python (Programming Language)
- Machine Learning Experiment
- Tracking MLOps Weights & Biases
- Cyber security basics
- Networking basics and weaknesses
- Linux operating system
- Business Management
- Advertising Online
- Business Strategy

Projects

CUSTOM ERP & AI STOCK PREDICTOR – JO4 BREW – Pretoria, ZA

August 2025

- Developed a full-stack ERP system using Python and Flask to digitize inventory management for a mobile coffee business.
- Implemented an AI-driven module to predict stock requirements based on historical sales data, reducing waste and optimizing supply chain efficiency.
- Architected a custom SQLite database to handle transaction logs, enforcing data integrity and enabling real-time financial reporting.

PROJECT B.U.L.L (IoT TRACKING SYSTEM) – Personal Project – Pretoria, ZA

January 2026

- Engineered a "Bovine Unified Location Logger" using ESP32 microcontrollers and GPS modules to track livestock movement in real-time.
- Integrated various sensors to monitor environmental conditions and animal health data, transmitting telemetry over long-range protocols.
- Designed the circuit schematics and power management system to ensure device longevity in remote agricultural settings.

- Deployed Wireshark and Nmap to capture and analyze TCP/IP packet traffic, identifying potential security vulnerabilities and unauthorized port access.
 - Configured a virtualized network environment to simulate malicious attacks and test firewall rules for Intrusion Detection Systems (IDS).
 - Generated a comprehensive network audit report detailing bandwidth usage, protocol distribution, and security recommendations.

Work Experience

OWNER & OPERATIONS MANAGER – JO4 BREW – Nigel, ZA January 2025 – Present

- Founded and managed a mobile coffee enterprise, overseeing all daily logistics, stock procurement, and financial reconciliation to ensure profitability.
 - Implemented a custom-built ERP system (Python/SQLite) to digitize inventory tracking, reducing stock discrepancies and improving re-order efficiency.
 - Directed marketing strategies and customer engagement, building a loyal client base through consistent service delivery and brand management.
 - Maintained operational hardware and electrical systems within the mobile unit, ensuring zero downtime during peak trading hours.

IT & DATA SUPPORT ASSISTANT – AP Cellular – Nigel, ZA January 2023 – June 2024

- Provided Tier 1 technical support for hardware and software issues, diagnosing connectivity faults and resolving mobile device errors for a high-volume client base.
 - Managed data integrity for the proprietary Point of Sale (POS) system, ensuring accurate transaction logs and inventory records were maintained daily.
 - Streamlined administrative workflows by optimizing file management and digital record-keeping, reducing manual data entry errors and improving retrieval speed.
 - Onboarded and trained new staff members on internal software protocols and cybersecurity best practices to ensure operational compliance.

Education

DIPLOMA IN INFORMATION TECHNOLOGY – RICHFIELD GRADUATE INSTITUTE – PRETORIA, ZA EXPECTED
2027

Distinctions: Networks 78%, Web Technology (78%), Information Systems (80%), Programming (77%)

Oracle Database SQL Certified Associate (1Z0-071) February 2026

CompTIA Network+ (N10-008) – In Progress