

Malik Soliman

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EDUCATION

Rutgers, The State University of New Jersey

Bachelor of Science in Computer Engineering

New Brunswick, New Jersey

Class of 2025

- Computer Engineering graduate with hands-on experience in hardware/software integration, system testing, troubleshooting, and technical documentation. Skilled in diagnosing failures, running test procedures, verifying requirements, and supporting system acceptance activities. Strong foundation in embedded systems, debugging, scripting, and technical communication.

SKILLS

- **Systems & Testing:** System integration, functional testing, verification, requirements analysis, regression testing, failure analysis, field diagnostics
- **Programming & Scripting:** Python, Java, C/C++, JavaScript, SQL, Shell scripting
- **Embedded & Electronics:** FPGA (Zybo Z7-10), VHDL fundamentals, SPI communication, sensors/actuators, timing analysis, robotics & PLC troubleshooting
- **Networking & Protocols:** TCP/IP, OSI Model, API integration, JSON, REST, basic RS-232/RS-485 concepts
- **Developer Tools:** Git, GitHub, VSCode, Vivado, Postman, Jenkins, Streamlit, Linux/UNIX
- **Documentation & Communication:** SOPs, test reports, system diagrams, troubleshooting guides, stakeholder communication

PROJECTS

CompariStock- [CLICK HERE](#)

Red Bank, New Jersey

Market Analytics Dashboard

July 2025 – August 2025

- Built a live market analytics dashboard using Python and Streamlit to visualize financial time-series data across multiple equity tickers.
- Designed data ingestion and caching workflows to optimize API usage and deliver near-real-time performance.
- Implemented interactive filtering and trend visualization to analyze price movement, volatility, and historical performance.
- Structured the application with modular components to support future expansion with predictive models and additional data sources.

Facility Systems Integration & Diagnostics Platform- [CLICK HERE](#)

Red Bank, New Jersey

System Engineering Project

June 2025 – July 2025

- Designed a configuration-driven facility monitoring platform to simulate and diagnose failures across building subsystems (HVAC, power, access, safety).
- Implemented YAML-based system definitions and dependency mapping to evaluate system health and failure propagation.
- Built modular diagnostics and logging pipelines to support fault isolation, validation, and post-event analysis.
- Developed a Streamlit interface to visualize subsystem status, fault states, and diagnostic outputs for operator workflows.
- Architected the system for scalability with additional facility subsystems and real-time data ingestion.

Smart Alarm System- [CLICK HERE](#)

Piscataway, New Jersey

Software / Systems Project

March 2025 – May 2025

- Developed an event-driven smart alarm system to detect threshold violations and trigger alerts based on configurable rules and severity levels.
- Implemented alarm escalation logic, prioritization, and acknowledgment handling to simulate real-world alerting workflows.
- Integrated structured logging and alert history tracking to support diagnostics and system auditing.
- Designed the system to interface with upstream facility signals and downstream notification or monitoring layers.

WORK EXPERIENCE

May Ship Repair Contracting Corporation

Staten Island, New York

Robotics Intern

May 2024 - August 2024

- Performed field troubleshooting and fault isolation on robotic and PLC-based control systems, identifying electrical, software, and sensor-level issues.
- Supported system integration activities including configuration, calibration, and verification of updated hardware/software components.
- Authored detailed SOPs, test steps, and troubleshooting procedures used by technicians and operators.
- Conducted operational analysis to document system behavior, contributing to a 35% improvement in overall reliability.
- Collaborated with engineering, operations, and support teams to resolve field issues and validate fixes.

Elite Finance Team, Business Finance Company

Tinton Falls, New Jersey

Finance Intern

July 2023-August 2023

- Built Python- and SQL-based data tools to automate reporting, improving end-user experience.
- Collaborated directly with non-technical team members to explain system outputs and guide adoption.