

HUSSAM ELTAYB RAHMA BADWI

Riyadh Branch Manager (SHIRAYAN AL GHARBIA CO) · Mechanical Engineer · PMP®

Riyadh, Saudi Arabia | Mobile: 0545155289 | Email: eng@hussameltayb.com

Personal Website | LinkedIn | GitHub

Professional Summary

Mechanical Engineer and Systems Developer graduating with First-Class Honors. Demonstrated career progression from Maintenance Engineer to Branch Manager at SHIRAYAN AL GHARBIA CO. Certified Project Management Professional (PMP®) and Certified Fire Alarm ITM Specialist (CFAITMS - NFPA 72). Combining engineering and administrative expertise with advanced programming skills to develop efficient technical solutions.

Professional Experience

SHIRAYAN AL GHARBIA CO | Riyadh (Feb 2022 — Present)

Progressed through a clear career path encompassing the following roles:

- **Riyadh Branch Manager (Current):** Lead branch operations, sales, and customer service, while achieving commercial targets and enhancing operational efficiency.
 - **Project Manager:** Oversee the planning and execution of safety and fire systems projects, ensuring delivery within scope, time, and budget.
 - **Maintenance Manager:** Schedule and manage maintenance teams, improve preventive procedures, and ensure safety systems readiness per standards.
 - **Maintenance Engineer:** Conduct technical inspections, troubleshoot faults, and install and maintain fire alarm systems and protection equipment.
-

Key Projects

Engineering & Safety Systems Projects (Excerpt from +70 Projects)

- **Saudi Water Authority:** Supplied and installed operational efficiency testing devices for fire pumps, and provided periodic maintenance for alarm systems at water production facilities.
- **Armed Forces Hospital in Madinah:** Managed and executed a comprehensive maintenance contract for fire alarm and suppression systems.
- **Ministry of National Guard:** Provided preventive maintenance services for firefighting pumps and sprinklers at the Primary Care Center building.

- **University of Hail:** Supervised the replacement works of the external network line for the university campus buildings.
- **Government & Private Institutions:** Supplied and installed fire suppression and alarm systems for various entities including Agricultural Development Fund, Kayan Holding Co., and Prisons Training Institute in Eastern Province.

Software & Systems Development Projects

- **CMMS & ERP System:** Designed and developed an integrated system for managing preventive maintenance schedules, fault tracking, and spare parts inventory, contributing to administrative process automation.
- **Safety Systems Tracking Platform (IoT Dashboard):** Built a web interface to connect and monitor the status of fire pumps and alarm panels via APIs, displaying real-time reports using Microsoft technologies and Power BI.
- **Technical Reports Automation App:** Developed a custom software application for field maintenance teams to automate report entry, reduce paperwork, and sync directly with the company's central databases.

Education & Certifications

Academic Education

- **B.Sc. (First-Class Honors) in Mechanical Engineering** — Omdurman Islamic University, Sudan (2021).

Professional Certifications

- **PMP®** — Project Management Institute (PMI).
- **Certified Fire Alarm ITM Specialist (CFAITMS)** — NFPA (Code 72).

Specialized Skills & Technical Matrices

I. General Management & Safety Skills

- Branch Management, Project Management, and Maintenance Planning.
- Implementation of Fire Alarm and Suppression Codes (NFPA 72).
- Inspection, Testing, and Maintenance (ITM) of Fire Systems.
- Leadership, Team Management, and Operational Planning.

II. Fire Alarm & Low Current Systems

Activities & Tasks

- **Task a:** Installation, troubleshooting, complete programming, integration with other systems, and network works.
- **Task b:** Preparation of BMS mapping.
- **Task c:** Resolving panel crashes, modifying board versions, and programming power units.
- **Task d:** Comprehensive and detailed knowledge from installation to handover, including maintenance of all components.
- **Task e:** Professional troubleshooting and fault correction.

Systems & Panels Matrix

Panels / Systems	a	b	c	d	e
Simplex	✓	✓			
Notifier	✓		✓		
Zeta	✓				✓
Context Plus	✓				✓
Other Addressable Panels					✓
All Conventional Systems				✓	

- Possess proprietary software for all mentioned programs.
- Accurate execution based on schematics with the ability to provide notes on non-matching designs (e.g., Numbering in Notifier).

III. Firefighting & Suppression Systems

Activities & Tasks

- **Task a:** Supervising the installation of fire pump systems and ensuring code compliance.
- **Task b:** Maintenance, diagnosis, and repair of diesel engines and control panels.
- **Task c:** Ability to upgrade conventional control systems to digital control systems.
- **Task d:** Sizing electrical cables and conducting commissioning and acceptance tests.
- **Task e:** Conducting performance, flow, engine, and hydrostatic pressure tests.
- **Task f:** Integrating pump systems with smart systems and control panels.

Systems & Panels Matrix

Systems / Tasks	a	b	c	d	e	f
Non-UL Fire Pumps	✓	✓	✓	✓	✓	✓
UL Fire Pumps – Horizontal	✓	✓		✓	✓	✓
UL Fire Pumps – Vertical Turbine	✓	✓		✓	✓	✓
Suppression Systems	✓	✓		✓	✓	✓

- Task **c** (Digital Control) is specific to **Non-UL Fire Pumps**, whereas Task **f** (Smart Systems Integration) applies to all systems.

IV. Programming & Systems Development Skills

Tech Stack: Python, PHP, Laravel, MySQL, Microsoft Power Platform, Excel, Power BI.

- **Full-Stack Development:** Developing systems and applications from front-end to servers and databases.
- **ERP Systems:** Designing and developing ERP systems and integrated business management solutions.
- **Custom Software:** Developing custom software and systems tailored to enterprise needs.
- **API & Integration:** Connecting systems and applications through APIs and integration services.
- **Automation:** Building automation systems for workflows and operational processes.
- **Microsoft Solutions:** Developing advanced solutions using Microsoft 365, Power Platform, Excel, and Power BI.
- **Database Management:** Designing and managing databases, and building advanced reports and queries.
- **System Architecture:** Analyzing, designing, and building systems from concept to operation.

Languages

- **Arabic:** Native.
- **English:** Intermediate.