

MOHD HAFIZUDDIN SHAH BIN ISMAIL

Systems Integration Engineer | Technical Project Delivery | Deployment & Commissioning
+60183659660 | hafiz.shah101@gmail.com | Perak, Malaysia



PROFESSIONAL SUMMARY

Technical Engineer with over 10 years of experience delivering installation, integration, testing, commissioning, and lifecycle support of mission-critical marine, surveillance, and networked systems. Proven track record coordinating multi-vendor deployments, conducting system acceptance activities, troubleshooting complex technical issues, and ensuring operational readiness across defence, maritime, and industrial environments.

Experienced in system integration, deployment execution, stakeholder coordination, technical documentation, and acceptance testing (STW, HAT, SAT). Recognized for bridging engineering, operations, and client requirements to deliver reliable system performance and successful project outcomes.

Certified Google Cloud Professional Cloud Architect with additional professional development in cybersecurity, project management, and data analytics, complementing extensive experience in systems integration, deployment, and technical operations.

Delivered projects supporting defence, maritime, and industrial operations including Royal Malaysian Navy assets, Vessel Traffic Systems (VTS), and integrated surveillance platforms.

KEY CAREER HIGHLIGHTS

- 10+ years delivering installation, integration, testing, commissioning, and support of mission-critical marine and surveillance systems.
- Successfully completed STW, HAT, SAT, and commissioning activities for radar, navigation, communication, and monitoring systems across defence and industrial projects.
- Integrated multi-vendor systems including radar, AIS, GPS, CCTV, VHF, ADCP, and environmental monitoring equipment.
- Supported Royal Malaysian Navy and industrial maritime clients through project execution, troubleshooting, maintenance, and operational handover activities.
- Registered Graduate Engineer with continuous professional development in cloud architecture, cybersecurity, project management, and data analytics.

Core Competencies

- | | |
|---|---------------------------------------|
| • Systems Integration & Deployment | • Operational Readiness & Handover |
| • Installation, Testing & Commissioning | • Technical Documentation & Reporting |
| • Technical Project Coordination | • Preventive & Corrective Maintenance |
| • Stakeholder & Vendor Management | • Acceptance Testing (STW, HAT, SAT) |
| • Troubleshooting & Root Cause Analysis | • Network Infrastructure Fundamentals |

Domain Expertise

- | | |
|--------------------------------|---|
| • Surveillance Radar Systems | • AIS, GPS & Communication Systems |
| • Vessel Traffic Systems (VTS) | • CCTV Systems |
| • Marine Navigation Systems | • Network Infrastructure (Routers & Switches) |
| • NMEA 0183 / NMEA 2000 | |

PROFESSIONAL EXPERIENCE

Technical Engineer

Jan 2025 – Feb 2026

Crescent Marine

- **System Maintenance Planning:** Planned and executed preventive and corrective maintenance activities for mission-critical VTS infrastructure, supporting continuous operational availability.
- **Diagnostics & Troubleshooting:** Performed detailed diagnostics on radar, radio, and sensor subsystems, identifying faults in signal paths, software interfaces, cabling, and network components to restore full system functionality.
- **Performance Verification:** Conducted comprehensive system health checks, functional tests, and calibration of VTS equipment to ensure all hardware and software components met OEM specifications and performance standards.
- **Technical Reporting:** Prepared detailed maintenance reports, system status updates, and rectification documentation for internal records and submission to Vale technical teams and vendors.
- **System Integration:** Led integration and interoperability activities for 6+ operational systems including radar, CCTV, AIS, VHF communications, meteorological sensors, and ADCP platforms, ensuring reliable data exchange and operational availability.

Technical Engineer

Apr 2015 – Dec 2024

D'Aquarian Services Sdn Bhd

- **Project Planning:** Developed detailed project schedules, prepared technical and progress reports for senior management, and ensured timely completion of tasks while meeting client requirements and standards.
- **Field Support:** Led installation, commissioning, troubleshooting and maintenance of marine navigation systems including Kelvin Radar, Hensoldt Hughes, and Simrad Radar models, ensuring smooth system performance.
- **System Calibration:** Performed NMEA signal interfacing and calibration for Radar, GPS, Speedlog, AIS, and Echo Sounder systems, ensuring accurate navigation data and strict compliance with OEM standards.
- Successfully delivered installation, integration, testing, and commissioning activities for marine navigation, surveillance, and communication systems across naval and commercial maritime projects, ensuring compliance with operational and OEM requirements.

Assistant Planning Engineer

Jul 2014 – Mar 2015

Sapura Kencana Petroleum

- **Progress Monitoring:** Collected and updated field data, tracked man-hours and manpower allocation, and prepared weekly executive reports to deliver accurate insights into EPCIC project progress and performance.
- **Team Coordination:** Collaborated with Planning, Production, Project Management, and Engineering teams to streamline workflows, optimize resource allocation, and ensure timely completion of EPCIC project milestones.

Relevant Transferable Experience

- | | |
|---------------------------------------|-----------------------------------|
| • System Deployment & Go-Live Support | • Infrastructure Troubleshooting |
| • Multi-Vendor Coordination | • Operational Readiness |
| • Acceptance Testing & Validation | • Client & Stakeholder Management |
| • Technical Documentation | |

Cloud & DevOps Infrastructure Projects

AWS Serverless Web Architecture & Automated CI/CD Pipeline (2026) Live Production URL: <https://hafizshah.com>

- **Cloud Infrastructure:** Deployed a secure, serverless web architecture utilizing Amazon S3 for object storage and Amazon CloudFront CDN for global low-latency content routing.
- **Edge Security & Isolation:** Enforced strict access boundaries via AWS Origin Access Control (OAC), securing traffic with free SSL/TLS certificates through AWS Certificate Manager (ACM) and Cloudflare Full (strict) encryption mode.
- **DevOps Automation:** Engineered an automated CI/CD Bash deployment script leveraging AWS CLI to securely sync local multimedia assets to S3 and programmatically purge CloudFront edge caches.

PROFESSIONAL QUALIFICATION

Professional Cloud Architect (PCA) – Google Cloud Google Certification	2026
Certified in Cyber Security ICS2 Certification	2025
Data Visualization with PowerBI New Wave Ops Solutions	2025
Cybersecurity Training APAC Security Fund - Trainocate	2026
Occupational Safety & Health Training (OGSP Level 1) National Institute of Occupational Safety and Health (NIOSH) Malaysia	2018
Registered Graduate Engineer Board of Engineer Malaysia Registration No: GE125966	2017
Tropical Basic Offshore Safety Induction and Emergency Training (T-BOSIET) SEQU Offshore Safety Sdn Bhd	2016
Certified in Project Management Brainbench via SKALI.NET Courses	2014

EDUCATION

Bachelor of Engineering Electronics in Nanotechnology with Honors Multimedia University Cyberjaya	2013
Foundation in Engineering Multimedia University Malacca	2007

TRAINING

Technical & Radar Training:

- Manta Neo Radar Training @ Hensoldt, Singapore
- CCTV Training (IP Training Session) for Vale Minerals Malaysia Sdn Bhd
- ADCP Installation & Commissioning Training for Vale Minerals Malaysia Sdn Bhd
- MK12 SharpEye Radar Setup & Installation Training @ Hensoldt, Enfield, United Kingdom
- Vessel Traffic System Study & Technical Proposal Training for Vale Minerals Malaysia Sdn Bhd

Health & Emergency Training:

- First Aid & Emergency Response Training

ADDITIONAL SKILL

- **Networking & IT Skills:** LAN Computer Networking, Windows, Linux Operating Systems, Amazon Web Services (AWS), Google Cloud Platform, DNS Management, Content Delivery Networks (CDN)
- **Programming & Software Development:** Bash Scripting, AWS CLI, GCP CLI, Basic C Programming, Kelvin Hughes, Putty, Wireshark
- **Office & Productivity Tools:** MS Excel, MS Word, MS PowerPoint, PowerBI
- **Language Proficiency:** English, Malay