

# SUBIN VASANTHAN

✈ Bahrain ✉ [subinvasanthan@gmail.com](mailto:subinvasanthan@gmail.com) ☎ +973 34123752  
🌐 <https://subinvasanthan.github.io/>

## PROFESSIONAL SUMMARY

Results-driven Senior Engineering Manager with 17+ years of experience in ICT, SAS, and ELV systems, including 14+ years leading large-scale airport projects from concept to completion. Proven expertise in managing complex systems, site operations, building automation, and energy management services. Experienced in leveraging AI technologies to enhance system efficiency, automate processes, and deliver advanced data analytics solutions. Skilled in designing efficient data models and delivering user-friendly, AI-powered solutions. Strong communicator with a track record of building client trust, driving repeat business, and delivering high-quality results on time and within budget.

## CORE COMPETENCIES

- Project Management
- Change Management
- System Integration
- IoT, Data Analytics and AI Automation
- Requirements and Configuration Management
- System Design
- Physical Security Systems
- Risk Management

## EDUCATION

PG in Data Engineering   Purdue University- US Distant Learning	2021-2022
MTech-Microelectronics   Manipal Institute of Technology, Manipal, INDIA	2009-2011
BTech-Electronics & Communication Engineering   Cochin University of Science and Technology, Cochin, INDIA	2000-2004

## TRAININGS & CERTIFICATIONS

- PMP ® #2162880
- Big Data on AWS #Link
- Azure Data Engineer #Link
- Six Sigma Green Belt (SSGB) #822886
- Hadoop Spark Developer #Link
- Genetec CCTV Certification
- Python for Data Science #Link
- FR & VA Certification
- AI Generalist

## WORK EXPERIENCE

### WPM & MAINTENANCE LEAD

MAR 2019 – PRESENT

THALES - BAHRAIN

#### DATA ANALYTICS INTEGRATION AND PHYSICAL SECURITY

- Led the preparation and delivery of work packages, including risk assessment, opportunity identification, and cost estimation, ensuring alignment with program requirements.
- Implemented Physical Security and Data Analytics systems by collaborating with over 30 cross-functional airport system teams for seamless system integration, managing supplier interfaces, and ensuring compliance with customer requirements.
- Reviewed and supported the development of key design documents, including System Requirements Specifications, System Design Specifications, Business Use Cases, Interface Control Documents, and Test Specifications.
- Coordinated with customers to facilitate operational readiness, system integration, and final testing, securing product approval and successful handover.

#### Achievements

- Successfully delivered Physical Security and Data Analytics systems (including analytics dashboards and KPIs) for Bahrain International Airport.
- Led the deployment of advanced AI solutions in airports including facial recognition for access and wanted persons, number plate recognition, crowd and queue monitoring, video analytics for safety and operations, Fly to Gate systems, and intelligent detection of baggage, intrusions, and aircraft turnaround events.
- Established operational processes for the maintenance team at Bahrain International Airport.

**Key Project:** Bahrain International Airport – Airport Modernization Program.

### CONFIGURATION & CHANGE MANAGER

OCT 2015 – MAR 2019

THALES - OMAN

#### Configuration & Asset Management

Developed and implemented the project Configuration Management Plan, overseeing Configuration, Requirements (using DOORS), and Asset Management for 34 systems, including Airport, Security, Telecommunication, and Network Systems, in collaboration with cross-functional leads.

#### Change & Variation Cost Management

Led the Change Management process, ensuring the implementation of Engineer Instructions and internal changes. Analyzed project scope, identified risks, and conducted cost assessments for change variations, ensuring accurate evaluation of time and cost impacts.

#### Achievements

- Successfully supported the commercial team in securing additional change variation claims totaling 20M OMR.
- Implemented and managed the Request for Change process with the client, successfully handling and closing 500+ change requests.
- Effectively delivered the project's System Assurance, Configuration, and Change Management processes.

**Key Projects:** Development of Muscat International and Salalah Airports – Master System Integrators (Contract Value: 102M OMR).

## SYSTEM INTEGRATION AND INTERFACE LEAD

APR 2013 – OCT 2015

ALEC – DUBAI, UAE

## SYSTEM INTEGRATION AND INTERFACES LEAD

AUG 2011 – APR 2013

SI CONSULT (NOW SECURITY HQ) – DUBAI, UAE

### System Integration & Project Delivery

- Successfully managed and delivered System Integrations and Interfaces across Airport, ELV, and MEP systems, ensuring on-time delivery and maintaining high-quality standards.
- Implemented and handed over the Virtualization Platform for all project servers, providing strategic recommendations to the client on additional systems suitable for virtualization within the existing airport infrastructure.
- Led the execution of comprehensive testing plans, including Unit, Functional, System Integration, and System Readiness tests, while coordinating Proof of Concept (PoC), lab trials, and on-site system integration.

### Key Projects:

- Concourse A – Dubai Airport Terminal 3 Extension (Contract Value: 4.3B AED)
- Concourse D – Dubai Airport Terminal 1 Extension (Contract Value: 3B AED)
- Dubai Airport Terminal 1 Expansion & Refurbishment (Contract Value: 50M AED)

## ENGINEER (MASTERS PROJECT)

MAY 2010 – JUL 2011

ISOFT – MANGALORE, INDIA

### Smart Traffic Management System

- Developed a model to automate traffic signal control based on real-time traffic density, ensuring priority clearance for emergency vehicles (e.g., ambulances, police) and monitoring traffic rule violations.
- Implemented a system to track vehicle congestion at signal junctions and automate status updates to the traffic control room for improved traffic flow management.

**Key Project:** Smart Traffic Management System

## PROJECT ENGINEER

JAN 2009 – JUL 2009

ELECTROMATIK L.L.C – DUBAI, UAE

### Automation Solutions & Team Leadership

- Led the requirement gathering, design, coordination, programming, implementation, and handover of advanced Automation Solutions (lighting, motion control, HVAC, audio systems, security controls) across high-rise buildings, industrial sites, and hotels.
- Supervised and guided cross-functional teams, ensuring optimal performance and successful project delivery within scope, time, and budget.

**Key Projects:** Silverene Twin Towers, Marina Heights, Marina Diamond, Nivitrix, and others.

## SENIOR PROJECT ENGINEER

JAN 2007 – DEC 2008

PACIFIC CONTROL SYSTEMS L.L.C – DUBAI, UAE

### System Design, Automation & Project Coordination

- Led system design, automation programming, installation, and site coordination for ICT, BMS, and ELV systems across diverse projects, including high-rise buildings, industrial areas, hotels, and residential properties, ensuring compliance with specifications and contractual requirements.
- Contributed to the Dubai Civil Defense Data Center project by coordinating with all building entities across Dubai, successfully integrating fire and lift alarms via IoT for remote monitoring.
- Led the Emaar Command Control Center team to manage critical MEP services, delivering real-time monitoring and providing the client with comprehensive energy-saving reports.

**Key Projects:** Trident Grand Residence, Jewels, Marina Scape, Bayside, Cisco CRE, EMAAR Command Control Center, Waterfront, Arabian Ranches, 24x7 Civil Defense Data Center

## SERVICE ENGINEER

SEP 2004 – NOV 2006

COMPUTER SPECIALISTS – BANGALORE, INDIA

- Planned, installed, and configured local area networks (LAN) and computer systems for offices, retail spaces, and small business units.
- Diagnosed and resolved complex network and system issues, ensuring minimal downtime and optimal performance.
- Collaborated with clients, engineers, and technicians to secure annual maintenance contracts, delivering 100% reliable service and ongoing system support.

## SKILLS

- |                                      |                               |                        |
|--------------------------------------|-------------------------------|------------------------|
| ▪ Python for Computer Vision and LLM | ▪ Frontend - React (Beginner) | ▪ AI Automation        |
| ▪ Database - PostgreSQL              | ▪ RabbitMQ                    | ▪ Python for AI Agents |
| ▪ Backend Development - FastAPI      | ▪ Arduino IDE                 | ▪                      |