



Vara lakshmi Penneru

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Rail Signalling - PDA (Project Design Authority) & Engineering Manager

- A result-oriented professional over 18+ years of experience in Railway Signalling Industry in Designs, Vendor Management, Customer Co-ordination, Project Management combining comprehensive technical knowledge and management skills, allowing problems to be solved creatively but with a broad understanding of stakeholder needs and attention to detail that ensures robust solutions
- IRSE Signalling Principle designer and Signalling Verifier
- Member of IRSE (MIRSE)
- Member of Singapore Standards committee

PROFESSIONAL COMMITMENTS

- Expert in Re-Signaling (brownfield) CBTC Projects and System Migration strategy Management
- Proven ability to analyze complex strategic and tactical problems into component parts.
- Outstanding delivery focus and attention to detail ensuring robust delivery of multidisciplinary solutions meeting the needs of all stakeholders.
- Committed to Quality, Accuracy, Timeliness and Efficiency in delivering allocated tasks.
- Managing and developing teams on CBTC systems

SKILLS

- CBTC system
- Project Management
- Vendor and Sub-contractor selection and management
- Customer co-ordination
- Team management
- Resource development, competency management system
- Co-ordination management with systemwide contractors
- Technical proposals
- Budget forecasting
- Management of Shutdown projects

EXPERIENCES

Project Design Authority

THALES

Thales Solutions Asia Pte Ltd, Singapore - Since June 2018

- Oversee the conduct and approve the outcome of trade studies to evaluate design alternatives in order to provide advice to both the customer and internal technical teams.
- Coach and mentor architectural and technical teams.
- Lead collaborative discussion between internal teams, vendors and customers to clarify and define system requirements.
- Consult with customers and their representatives in order to appropriately influence system architecture and design.
- Ensure that the proposed architecture and design will meet the customer's requirements
- Approve the system architecture, and provide leadership and guidance to the architecture team
- Through broad consultation, produce documentation in support of the project, to the satisfaction of the customer.
- Review and evaluate company and third party documentation and products.
- Liaise with customers on technical, architectural and procedural issues as required.
- Other duties as directed by the Project Manager.
- Ensuring the implementation of multi-project synergies in order to optimize cost of technical solutions.
- Developing and implementing policies, standards and procedures for the engineering and technical work performed in the Program, in conjunction with the Systems Engineering Manager.
- Review of safety documentation and leading HAZOP sessions.
- Review of CBTC design documents and control tables.

Engineering Manager

THALES

Thales Solutions Asia Pte Ltd, Singapore - April 2014 to 2018

- Working as Engineering Manager with responsible to provide hardware solutions for Wayside signalling interface design including hardware components selection.
 - Head of Department - HOD for all the engineering designs for NSEW Singapore project with existing Westinghouse rail system interface with CBTC Thales PMI moving block system, Changeover Cubicle comprises 54 stations and a route length of 94 km.
 - Migration strategy Manager for all the NSEWP projects
 - Ensure that technical and safety standards are maintained in all aspects of design within the allocated project
 - Responsible to confirm that all design work is controlled, implemented and undertaken in accordance with relevant instructions/standards.
 - Manage the team resources and work package with forecasting manpower requirement to management for all the design works
 - Assist and monitor with the planning and progress of works in relation to timeline and budget.
 - Trained Singapore SMRT maintenance and operations team on CBTC wayside signalling design principles.
 - Presented NSEW Re-signalling wayside interlocking design and changeover principles to IRSE Singapore and IRSE Malaysia sections.
 - Responsible to deliver Proof of Concept stations, North South Line, East west line and Tuas extension.
 - Worked as an interface point between Thales Canada, Thales France and LTA/SMRT Singapore for wayside interface signalling solution.
 - Provided conceptual design solution for the system changeover from existing legacy system to new CBTC system
 - Supporting to supplier and procurement team in addressing component selection for hardware BOQ
 - Managing the sub-contractors
 - Complete signalling solutions for Canberra station, TanahMerah extension and 4in1 depot including interface with other SWC's.
 - Managing Installation, Planning and Design teams including work package management
 - Head of Decommissioning for NSEW project
 - Supporting bid team with cost estimation, schedule risks, technical description, migration plan and BOQ.
 - CCRB member with safety case preparation support for NSEW&TWE projects
- ▶ Design, manufacture, delivery to site installation, migration, testing and commissioning of the signalling system for North-South and East-West lines and Tuas Extension projects (NSEW/TWE) in Singapore

Design Manager

BOMBARDIER
the evolution of mobility

BOMBARDIER TRANSPORTATION, MALAYSIA - April 2013 to April 2014

- ▶ • Confirm that all design work is controlled, implemented and undertaken in accordance with relevant instructions/standards.
 - Manage, control and monitor design activities ensuring timescales, contractual requirements and quality are met.
 - Manage the Signalling Design Group's input to projects to fully comply with all statutory and regulatory provisions, including those prescribed by statutory bodies.
 - Managing the sub-contractors. interface with other SWC's and customer
- ▶ • Worked as a Project Engineer and design manager for Klang valley Mass Rapid Transit (KVMRT) with Bombardier Cityflo 650 automatic train control solutions for Sungai Buloh-Kajang line in Malaysia

Hardware Application Engineer

THALES

Thales Asia solutions Pte Ltd - April 2012 to April 2013

- Lead designer - Produced conceptual COC principle design for NSEW Singapore project with existing Westinghouse rail system interface with CBTC Thales PMI moving block system with Changeover Cubicle comprises 53 stations and a route length of 94 km.
- Responsible to deliver Proof of Concept stations design for Changi Airport, Changi Online, EXPO, Tanah Merah stations and Bishan Depot Test Track.
- Worked as an interface point between Thales Canada, France and LTA/SMRT Singapore
- Provided conceptual COC interface design for wayside signalling devices
- Supporting to supplier and procurement team in addressing the technical issues for Signalling racks.

Senior Signalling Design Engineer

INFOTECH ENTERPRISES LTD., BANGALORE - May 2010 to April 2012


Infotech
Creating Business Impact

- ▶ • Carry out Independent Design, Checking and Verification of Signalling Systems.
- Ensure that Technical and Safety Standards are maintained in all aspect of Design within the allocated project
- Provide support and guidance to the Design Manager on all aspects of the allocated project.
- Assist in the forecasting of Manpower requirements for all design work to enable allocation of resources to be made.
- Assist and monitor with the planning and progress or works in relation to timeline and budget.

- ▶ • Worked as a verifier (Independent checker) for Control table of the Siemens technologies used in New Delhi and Shivaji Stadium, IGI Airport Station & Dwaraka Sector 21 of Delhi Metro Rail Corporation (DMRC)
- ▶ • Produced bookwiring Vol.2, SMCPLC design, Cut-in design, COC recovery design, Modification design and Record updated in Thales Seltrac moving block system for Northern line JNUP (Jubilee and Northern Line Upgrade Project)

Senior Design Engineer

McML

MCML SYSTEMS PVT LTD, BANGALORE. - March 2004 to April 2010

- ▶ Commencing as a trainee engineer reaching the post of Senior Design Engineer
- ▶ (Team Leader) with responsibility for the management of a team of 15 staff, plus trainees.
- ▶ • Worked as Design Engineer and Team leader for producing and verifying the Signalling interlocking design.
- ▶ • Worked as Design Engineer on Scheme design project (Consisting of stages like data capture, DTG-R Simulation using Scheme Simulation tool) for Sub-section 15, Sub-Section 16 and Victoria line section of LUL for Westinghouse Rail Systems, UK.
- ▶ • Phase-2: Standardization of Route lists for England & Wales on South East, LNW and Western region of Network Rail of Babcock Rail