

NITIPHAT KHAMHOM

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SUMMARY

A self-managed and result-oriented *System Integration Lead (Railway)* with **9+ years** of knowledge in **Integrated & Interface Management**. Hands-on technical experience in ensuring design, operability, performance and reliability for, **Train Operation, Rolling stock, Railway electrification and Conductor rail system**. Well versed in all phases of teamwork and experienced in managing different contractual levels and multiple stakeholders.

Now, pursuing in challenging and enriching **Management level** assignments in *System Integration or Project Management* for all business units of railway sector.

EDUCATION

California State University, Fullerton, USA Master of Science in Electrical Engineering	GPA - 3.79	August, 2012 – May, 2014
Kasetsart University, Bangkok, Thailand Bachelor of Engineering (Electrical Engineering)	GPA - 3.19	June, 2003 – March, 2007

MAJOR ACHIEVEMENT

Railway (Wayside and Integration) market

GOLD LINE PROJECT (APM300 – THAILAND)

- Mitigation Plans for addressing the technical issues for system-wide level such as Depot operations, Operating fleets and Conductor rail Interface with Rolling Stock.
- System Integration Solution (Integrated & Interface Management Plan), Overall System Architecture, Interface Matrix, and Interface Control Tools such as ICDs, IASs, RFIs, etc.
- Finalized Daily services, Fleet Performance and Preparing System Operating Procedures (SOPs) required by customer (daily operating plan, failure and emergency management)
- Set-up the plan for Testing and Commissioning activities (T&C management plan, test list, test Sequences, test program, integrated test procedures including safety milestone check list – SA support)

Other Projects

- Standardized New technical requirement documents (TRDs) of PS&D and Conductor rail systems.
- Introduced New design of conductor rail system to BPLRT project, Singapore.
- Finalized PS&D solution and Train Operation concept for Highspeed train (Bangkok-Rayong) bid, Thailand.

Railway (Rolling stock) market

- Developed electrical sub-system solution for Indian metro platform (Movia Maxx 25).
- Finalized electrical sub-system solutions for R151 in Singapore during Bid phase (Contract award project).

Electronic product (Home Appliances) market

- Created new hair dryer product (NE-60) and lunched into Japan and EU market.

WORK EXPERIENCE

AMR ASIA Co., Ltd.

Bangkok, Thailand

Position: System Integration Lead (GOLD LINE PROJECT)

Feb, 2019 – Present

- To digest and understand the project direction and come up with the right strategy to System Integration Team for supporting the project properly (Integrated & Interface Management Plans, Tools and SOPs).

- To verify the suitable solution prepared by SI team for solving Interface and technical issues and then raise to senior management levels for final direction.
- To manage daily basis activities of System Integration Team for both design and interface management (Civil, external and Internal).
- To ensure that all Interface and Integrated level requirements are captured and managed properly through engineering design phases (Interface Identification) by using the right tools (Interface Management) such as Interface Control Document (ICDs), Interface Agreement Sheet (IASs), Request for information (RFIs).
- To lead the technical meeting (Interface) with sub-systems, external parties including customers.
- To support ITC manager on T&C activities by creating the Testing & Commissioning Management Plan, Integrated Test Plan, Overall System Test Flow and Schedule.
- To verify and validate Interface Test Procedure (IFTs) and Integrated Test Procedures (SITs) prepared by SI team.
- To support the Project Manager and other business units on technical aspects or others if requested.
- To lead the Integrated Test Activities during T&C phase.

Bombardier Transportation Signal (Thailand) Ltd.

Bangkok, Thailand

Position: System Integration, Operation Analysis & Power Modeling Engineer

July, 2017 – Jan, 2019

Key Projects: Core team management of BPLRT project in Singapore.

- Designed and integrated the New concept of Conductor rail system (600VAC for APM300R) to solve the interface problems between collector shoes and conductor rail.
- Improved functionalities, reliabilities and to redesign the power-sectioning of conductor rail systems (support for Ops analysis and Power modeling).
- Prepared the migration strategy of conductor rail replacement and coordinated on interface descriptions with all relevant functions (Civil, PS&D, Rolling stock and Signaling).
- Completed technical requirement document and to finalize the solution and contract with potential suppliers.
- Reviewed and to submit technical deliverables starting from Tender through FDR phases.

Key Bids: Engineering solution team of Highspeed train (Bangkok-Rayong) bid in Thailand

- Performed Train operation analysis by using Transit Studio (system constraints and failure assessment, fleet size calculation, runtime, speed profile and reliable operating headway solutions for all possible services).
- Performed Power Modeling Studies by using Open-Powernet (AC Load flow, Voltage drop and System unbalance study) and locating and sizing main PS&D equipment.
- Determined the solution of PS&D (Double phase 25kVAC through OCS with Auto transformer) and optimized the solution based on the system constraints and fleet size demand and present to End customer.
- Performed system integration to ensure system interface requirement between PS&D with Civil and others
- Provided all required technical deliverables for the Bid.

Other projects/bids:

- Supported system integration of Power supply and Distribution system for Green Line and Gold line projects.
- Finalized PS&D architecture (BSS, TSS, SS), Conductor rail solution (Vdc) and supported on Train operation analysis for Cairo Line6, Cairo Monorail.
- Completed the design of UPS and Battery Charger for PUNE and Mumbai L2 and L7 bids.
- Finalized the power modeling and PS&D concept for Pink/Yellow project (supported during bid phase).

Bombardier Transportation Signal (Thailand) Ltd.

Bangkok, Thailand

Position: Electrical System Engineer (Rolling stock)

July, 2015 – July, 2017

- Analyzed the customer requirement (ITT) and designed the electrical sub-systems accordingly (Lighting, Fire detection, Wiper, Horn, Event recorder, Master controller, PWM generator and Pantograph).
- Discussed with suppliers on cost, technical and functionalities issues and followed up all required deliverables.
- Reviewed the technical offer and detail design from suppliers and finalized the sub-systems solutions.
- Ensured that all Risks, Safety, Reliability and Maintainability issues are addressed in designs.
- Independently managed and coordinated with all relevant stakeholders (e.g. installation) to complete the sub-system design and ensured that all requirements from customer is fulfilled (perform as a system manager).
- Prepared all deliverables and supported all required activities for ongoing projects (e.g. RS11, R151).

California State University, Fullerton

Fullerton, USA

Position: Instructional Student Assistant

August, 2013 – May, 2014

- Presented the introduction to Lab Instrumentation and Methodology for undergraduate students.
- Graded assignments for students in the graduate courses.

Panasonic Electric Works (Thailand) Co., Ltd.

Pathum Thani, Thailand

Position: Design Engineer (New product development)

September, 2007 – September, 2010

- Controlled and managed the entire R&D projects smoothly as planned.
- Developed home appliance products to comply functional and safety requirements.
- Designed plastic parts (handle, housing, etc.) for product assembly.
- Prepared assembly drawings, specifications and testing procedure for new product introduction.
- Solved technical problems, safety issues and supported production line during mass-production period.

SKILLS

Developments and Management

- Solid managerial skills in all levels of system-integration, Interfaces and people. Excellent in coordination, presentation and work well in a fast-paced and high-pressured environment.
- Innovative researcher of cutting-edge technologies to improve system efficiency and technical problem analysis.

Software

- Knowledge and extensive use in Operation Analysis and Power modeling software: Transit Studio and EnerG plan (In-house training at Derby, UK), ETAP, Open-Track and Open-Powernet.
- Knowledge and extensive use of AutoCAD, DOORS, PDM and MatLab.

Languages and Trainings

- Advanced in English (TOEIC: 860).
- Completed workshop of Railway Electrification Engineering by Engineering Institute of Thailand (Aug, 2018).
- Passed test of “Workplace Safety and Health in Construction Sites” for working in Singapore (May, 2018).