

Raghul Mohankumar

Graduate Student
(Electrical Engineering)

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Click here to view portfolio website

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An active electrical engineer with 8 years of
extensive practical and technical experience
in a competitive and international context.

Analytical and professional specializing in new
product development and engineering change
management of electrical architectures.

A collaborative communicator focused on
building relationships across business lines.

AREAS OF EXPERTISE

- Electrical Machines
- Electrical Circuit Design
- Wiring Harness Design
- Lighting Development
- Electrical System Integration
- Prototyping and Piloting
- Electrical Components Selection
- Failure and Risk Analysis
- Time Management and Prioritisation

ENGINEERING SOFTWARES

- AutoCAD Electrical
- MathCAD & R Programming
- MATLAB & SIMULINK
- VariPDM & VariClient
- Vertex ED19
- Microsoft Office Tools & SAP

LANGUAGES KNOWN

English, Tamil and Telugu

HOBBIES

EDUCATION

2021 - current

Master's Degree in Electrical Engineering,
University of New Brunswick.

Fredericton, NB,
Canada

2008 - 2012

Bachelor's Degree in Electrical & Electronics Engineering,
Anna University.

Chennai, TN,
India

PROFESSIONAL EXCELLENCE

- Indigenisation of cost competent load weighing strain gauge sensor for elevator products.
- Design of Speed Indication Module for Rescue Operations during Human Trap conditions.
- Development of LED based Interior Lighting by engaging with suppliers for energy efficiency.
- Prototyping of Child Trap Monitoring system using Arduino UNO module.

PROFESSIONAL EXPERIENCE

2014 - 2021

KONE CORPORATION

Chennai, TN, India



Senior Electrical Engineer (1st October 2018 to 12th February 2021)

- Incorporating the engineering changes in Electrification Architecture by developing and implementing actionable and targeted change management plans for prototyping and piloting at production and field respectively.
- Perform change impact assessments for potential risks, critical to quality factors and production feasibility.
- Strategise with key stakeholders such as suppliers, frontline and production co-ordinators for driving and executing the change requests throughout the various stages of product change management.
- Implementation of changes in electrification architecture according to the periodic revisions of standards.
- Analysing the quality feedbacks report related to the electrification module from the site and providing technical solution accordingly.

Electrical Engineer (23rd July 2014 to 30th September 2018)

- Electrical System Design includes the wiring circuitry & harness schedule for various modules using Auto-CAD for the electrification according to the standards.
- The Component Selection includes Switchgear, Electrical Machines, Electrical Drives, Actuator Switches, Load Weighing Sensors, etc. based on the product configurations.
- The Prototyping & Verification of the entire electrical system in the In-House & Field.
- Design of LED lighting System with Wiring Circuitry, Driver Selection, Lumen Calculation using Math-CAD.
- Supply Line & Pre-Production validation using SAP Software before the product releases.
- Involvement in supplier manufacturing processes by analyzing & conveying the critical to quality parameters to resolve technical issues at supplier end.
- Documentation of the circuit drawings, wiring harness drawings, operational sequence, product descriptions, bill of materials, etc. based on the product parameters.
- Creation of bill of materials, item masters and product structure database in the VariPDM software.
- Calculation of energy consumption for the electrical system in both Standby Mode & Operational Mode for the design of the energy efficient products.
- Costing workout and costing comparisons based on the bill of materials and commercial requirements.
- Creation of Delivery Documentation Circuit Drawings for easy troubleshooting at site.

PROFESSIONAL EXPERIENCE

2012 - 2014

TATA ELXSI LIMITED

Bengaluru, KA, India



Engineer (18th July 2012 to 17th July 2014)

- Integration of the Hardware Drivers with the middleware and applications in the Set Top Box system.
- Prototype Testing includes framing of regular and ADHOC test cases using white and black box testing methodology.
- Validation of Motorola Embedded Devices for reliability, UI improvement, usability, regression and consistency.