# Raghul Mohankumar Graduate Student (Electrical Engineering)

615, Windsor Street, Fredericton, New Brunswick, E3B4G3, Canada.



Click here to view portfolio website

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

raghulmohankumar@gmail.com

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













2021 - current University of New Brunswick.

2008 - 2012 Bachelor's Degree in Electrical & Electronics Engineering, Anna University.

Fredericton, NB, Canada

Chennai, TN, India



### PROFESSIONAL EXCELLENCE

- Indiginisation 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

Chennai, TN, India



2014 - 2021 KO

**KONE CORPORATION** 

#### 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.