Arun Baby

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Summary

- Specializing in product development, design and quality assurance with a focus on the manufacturing industry with more than 3 years of experience
- Proficient in AutoCAD, SOLIDWORKS and CATIA V5. Currently pursuing CAPM certification.
- Experienced in R&D of products from conception to final production
- Excellent understanding of Lean and Six Sigma tools and passionate about implementing Lean Manufacturing philosophy in achieving waste reduction and improving process flow

Work Experience

Ryerson University — Toronto, ON

Research Assistant (Design and Product Development) — Sept 2019 – May 2020

- Designed and managed the configurations of lighting fixtures and aircraft cabin interiors as part of R&D efforts into developing modular aircraft interiors using CATIA V5 and SOLIDWORKS
- Performed multi-disciplinary research combining aircraft lighting systems, image processing and human perception for enhancing passenger comfort using artificial intelligence (CNN's)

Test Center Examiner (Administration) — Sept 2018 – May 2020

- Facilitated access to education for students living with disabilities using advanced technology while working as part of a dedicated team of 70+ fellow professionals
- Managed confidential information and ensured fair opportunities for students with disabilities
- Liaised between academic staff and administration on a daily basis to ensure smooth operations

Ryerson University & Bombardier Aerospace — Downsview Park, ON

Graduate Researcher (Design and Product Development) — Sept 2018 – Sept 2019

- Developed an entire neural network to categorize large image data sets for facial identification to be used to automate and reduce workload of cabin crew members using MATLAB and Python
- Employed statistical analysis to improve process flow, resource utilization and aide project management using Microsoft Project software
- Ensured that the designs of the project moved into prototype stage and eventually was manufacturable by using Design for Six Sigma (DSS) methodology

Honda of Canada Manufacturing — Alliston, ON

Internal Parts Auditor (Quality) — Nov 2017-Jan 2018

- Employing statistical process controls (SPC) techniques and metrological testing to enforce quality control and to ascertain products are within specification
- Conducted routine audit of raw material supplies and production line output of 500+ automotive parts everyday inside a high-volume manufacturing facility

Quality Assurance Inspector (Co-op) — Aug 2017-Nov 2017

- Put lean manufacturing philosophy to practice to achieve waste reduction and employed advanced quality tools like Kaizen, 5S and 5-Why techniques to ensure on-time operations
- Performed receiving inspection and acceptance sampling operations

Indian Space Research Organization Kerala, India

Student Intern (Quality and Testing) Aug 2016-Dec 2016

- Developed and maintained detailed documentation (FMEA) of mission-critical subsystem
- Supported senior engineers in testing, maintenance and statistical process control of equipment
- Developed fault-tree analysis and assisted in reliability estimations of subsystems for booster rockets

Education

Master's in Engineering – Aerospace/ Mechanical Engineering

Ryerson University |Toronto *Status: Graduated in 2019*

Program Highlights: Reliability engineering, Advanced statistics, Advanced Manufacturing and Systems Integration

Ontario College Graduate Certificate in Quality Assurance - Manufacturing & Management

Sheridan College | Brampton *Status: Graduated in 2017*

Program Highlights: Engineering Statistics, Design of Experiments, Lean and Six Sigma, Statistical Process Control, Quality Planning, ISO Standards, Quality Audit, Instrumentation and Process Control, Total Quality Management, GD&T

Bachelor's Degree in Mechanical/Aeronautical Engineering

University of Calicut | India *Status: Graduated in 2016*

Program Highlights: Propulsion, Aerodynamics, Electrical systems, Structures, Metallurgy and Material Sciences, Computational Fluid Dynamics, Control Engineering

Projects

Intelligent Lighting Control for Aircraft Cabin Using Neural Networks Based on Human Perception (2019)

Developed a robust passenger identification system to control zone lighting onboard business jets based on the Bombardier Global 7500.

Design of a Composite Helicopter Rotor Manufacturing Assembly (2018)

Designed a comprehensive composite main rotor blade manufacturing assembly, including the tooling, plant layout and process flow.

Comprehensive Analysis of Carbon Nanotube Reinforced Aluminum Composite (2018)

Analysed the properties, manufacturing processes and developed a comprehensive understanding of the future prospects of Carbon Nanotube reinforced Aluminium composites.

Certifications and Professional Memberships

- **Engineer-in-Training (EIT)** - Professional Engineers Ontario (PEO)
- **Certified Process Quality Analyst (CPQA**) - American Society for Quality (ASQ)
- **Certified Six Sigma Green Belt (CSSGB)** – Six Sigma Academy and Ryerson University
- **Certificate in Introduction to Project Management** - University of Adelaide and edX
- **Certified Associate in Project Management (CAPM)** – Project Management Institute *(In Progress)*