

Ganeshan Subramanian

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Industrial Engineering graduate with a master's degree from North Carolina State University, enthusiastic about supply chain and process optimization. I have gained rich experiences from challenging projects in manufacturing, operations and process improvement and have worked on several interesting research-grade projects in supply chain management, logistics and business analytics. I plan to learn more deeply in this field and implement the knowledge I have gained to contribute towards business process optimization of the organization I work in.

EDUCATION

Master of Industrial Engineering | North Carolina State University

Aug 2019 – May 2021

GPA – 3.74/4

Graduate Research | Proximity Factor analysis in logistic networks: Comparative analysis of demand flow in various logistic networks using distance & population for computing without any external parameters. On using proximity factor as a parameter, demand flow was observed to be limited at larger distances due to feasibility. Error calculation with real data in airline logistic network proved proximity factor parameter essential for predicting demand flow.

Bachelor of Technology Production Engineering | Veermata Jijabai Technological Institute

July 2015 – May 2019

CPI – 7.58/10

SKILLS

Software: SQL, MS Excel, MS Access, VBA, Tableau, Power BI, Python, R, MATLAB, JMP, Minitab, AutoCAD, ProE, AMPL

Competencies: PLC programming, Statistical Process Control, Project Management, Demand Planning and Forecasting, Enterprise Resource Planning, TOC principles, Value Stream Mapping, System Optimization, CNC programming

WORK EXPERIENCE

Godrej Aerospace | Engineering Intern

Jun 2018 – Dec 2018

- Designed an optimized plant layout on studying the existing plant using Industrial engineering techniques viz. value stream mapping, time and motion study, to be implemented by the company for its new plant location. The optimized layout resolves majority of the material & man movement issues and reduces downtime involved in process workflow.
- Designed component storage boxes using standardized 5S methodology and handled the procurement of these boxes. This standardization reduced the material handling mishaps in the plant & they were ergonomically easier to carry.
- Performed TPM audits and identified various scenarios to incorporate Kaizen methodology for continuous improvement in both machine shop and office sections, to improve equipment reliability & increase productivity.

ASB International | Engineering Intern

Dec 2017 – Jan 2018

- Performed simulations for Mazak machine turning operations and trained operators for performing CNC operations.

Godrej Interio | Engineering Intern

May 2017 – Jun 2017

- Developed a tool management system to ensure proper identification, tracking and tool life monitoring of fixtures used in furniture manufacturing. This helped in conducting thorough TPM audits on a quarterly basis.

Volvo Eicher Engineering Components | Engineering Intern

Dec 2016

- Performed a process capability analysis on a hobbing machine from a statistical process control standpoint from a dataset of inner diameter readings of gears used in differential gearbox.

CERTIFICATIONS AND ACHIEVEMENTS

Certified Associate in Project Management (CAPM) | Project Management Institute - Credential ID #2979547

Lean Six Sigma Green Belt (ICGB) | International Association for Six Sigma Certification - Credential ID G-8237

9th IEOM International Conference Paper Presentation - Techno-Commercial and Feasibility Analysis of Energy Efficient Solar Powered Technologies for Indian Scenarios

ACADEMIC & INDUSTRY PROJECTS

Warehouse Management System: DBMS for automating total inventory control integrating BOM during procurement, production & dispatch activities using SQL and VBA. Integrated with visualizations for inventory level & quality reports.

Optimizing compressive strength in concrete recipes: Regression analysis of 1030 observations to determine effect of 8 parameters on compressive strength of concrete for computing optimal values for maximum compressive strength.

Design of Experiments in Precision Parts Manufacturing: Exploratory data analysis & factor analysis to identify factors affecting variability in molded parts to predict optimal settings; reducing geometric variability in the manufacturing process.

Automated Material Handling System: Developed a prototype using PLC programming to sort objects of different dimensions and materials using pneumatic actuators, photoelectric and electromagnetic sensors.

Supply planning during covid-19 for Lenovo products: Demand prediction with 80% accuracy from parameter effects on covid-19 sales & triple exponential smoothing forecast. Proposed inventory policy saving 25% supply chain costs.

Production Planning Control at Dynatrol Corp: Identified bottleneck at Andover assembly for throughput and cycle time computations. Suggested improvements in the production policies for reducing inventory holding with demand variability.

Schedule Planning at Blanchard Importing Co: Performed cost analysis computing setup and holding costs to determine EOQ & ROP. Performed Wagner Whitin analysis to suggest an inventory policy to reduce setup & holding costs.