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OBJECTIVE

Graduate student pursuing Master's in Industrial Engineering at NC state university graduating in May 2021 and having 9 months experience in Industry. Looking for a suitable opportunity in the areas of operations, supply chain management and system optimization.

EDUCATION

Master of Industrial Engineering | North Carolina State University   Aug 2019 – Present
GPA – 3.75/4

Bachelor of Technology Production Engineering | Veermata Jijabai Technological Institute   July 2015 – May 2019
CPI – 7.58/10

WORK EXPERIENCE

Godrej Aerospace | Engineering Intern   Jun 2018 – Dec 2018
- Designed an optimized plant layout on studying the existing plant base using Industrial engineering techniques which the company is intending to implement while shifting to a new location in the coming few years.
- Designed standardized material storage boxes to reduce material handling mishaps which occur in the plant.

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 by observing the manufacturing process flow of bevel, crown & pinion, and transmission gears.

PROJECTS

Warehouse Management System: Designed a database management system on MS Access to maintain total inventory control integrated with a complete bill of material (child part to final product) with automated tracking of all procurement, production, and dispatch activities in the warehouse. The system also covers key features of generating invoices, locating and viewing supplier details, displaying inventory with quality reports.

Design of Experiments for a Precision Parts Manufacturing System: Performed hypothesis testing using JMP and analyzed the data to identify the significant factors affecting variability by using 67 runs of analysis within a given constraint of completing within 100 runs. Built a regression model to predict the variability of the significant factors and generate the optimal settings for these factors to minimize the geometric variability for the molding process.

Retail Store Locator: Designed a database management system on MS Access to locate the nearest retail stores viz. Walmart, Target, Food Lion, CostCo, Sam's Club and Murphy's within the average travel radius as per customer travel willingness based on the zip code centroid location of the metropolitan area provided.

Prediction of Various Factors Involved in Determining Compressive Strength of Concrete: Using a data set of around 1030 observations of 8 variables, 6 different regression models were fitted and the significance of various combinations of variables were analyzed. The correlation of every predictor variable with each other and towards the response variable was commented upon and a result was obtained indicating the most optimal combination of predictor variables for best response variable.

Proximity factor analysis in airline logistic networks: Analysis of demand flow using a proximity factor model and radiation model based on population data of various locations and comparing results with real world scenarios to understand which method is better for predicting demand flow.

Demand analysis and forecast for Lenovo products in a covid-19 environment: The effect of the covid-19 pandemic was observed on the demand of Lenovo products and compared to the original pre-pandemic demand. This observation analysis was used to forecast future demands using which an ordering policy and inventory management policy was proposed to save on supply chain logistic costs.

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.

Review of Harvard case studies:

Blanchard Importing and Distributing Co. - Performed Wagner Whitin and EOQ model analysis and suggested better scheduling and ordering policies which curbed inventory carrying costs.

Dynatrol Corporation - Determined the bottleneck in the production line and critical WIP and suggested various improvements in the placing of machinery and a parallel rework line.

IoT based telehealth and telemedicine monitoring using LEO satellites: Development of a product which is an integration of various components viz. sensors, communication systems and cloud-based services put together for continuous monitoring of blood pressure, EKG, heart rate and rhythm of cardiovascular patients living in rural areas by their physicians present in urban locations. Various amounts of market research, customer analysis, competitor analysis, technical and feasibility analyses were performed for the concept development of this product and a go to market strategy along with revenue models were proposed for introducing the product in rural areas of Arkansas, Alabama, and Louisiana.

SKILLS
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Computing: SQL, Python, R, C++, MATLAB, JMP, Minitab

Design: AutoCAD, ProE

Industry: MS Office, Project Management

Tools: Tableau, Power BI