Rohith Kumar Vetrivel

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WORK EXPERIENCE

DOOSAN BOBCAT, WI, USA

January 2025 - Present

Manufacturing Engineering Co-Op

- Designed 14 fixtures using SolidWorks/Creo, improving cycle time by 18% and eliminating 2.3 hours of weekly downtime.
- Led traceability project, ensuring 100% frame tracking and cutting rework by 12% through cross-functional efforts.
- Drove Advanced Manufacturing in NPD by resolving 7 DFM issues and optimizing pilot builds for production readiness.
- Optimized tool room layout and production flow, cutting retrieval time 40% and ensuring on-time pilot batch delivery.
- Built barcode-enabled inventory app with Power Apps/Flow for real-time tracking and automated low-stock email alerts.
- Performed time studies and updated work instructions for CAT lane during SAP-to-Oracle transition.

MM MOTORS MAHINDRA, INDIA

May 2020 - December 2023

Business & Operations Manager

- Optimized OEM supply chain, reducing stock discrepancies by 10% and ensuring inventory compliance.
- Implemented ABC & EOQ in SAP ERP, boosting inventory turnaround by 68% and cutting safety stock by 15%.
- Refined BOM & warehouse flow, reducing stock by 65% and improving parts identification by 25% using AutoCAD.
- Managed RFQ and vendor selection, optimizing inbound logistics to reduce lead time by 22% and prevent stockouts.
- Improved demand forecasting accuracy by 20% using SAP ERP data and Excel-based statistical models.
- Built Tableau dashboards for real-time supply chain KPI tracking, boosting process efficiency by 15% through analytics.

STAAN BIO-MED ENGINEERING, INDIA

June 2019 - July 2019

Lean Manufacturing Engineering Intern

- Applied 5S and Gemba walk to organize medical inventory, improving traceability and cutting retrieval time 30%.
- Used SPC charts and VSM to reduce scrap 40% and boost rotor throughput in medical device production.
- Performed GR&R and root cause analysis to improve quality and reduce defects in medical device assembly.

PROJECTS

E2E Supply Chain Optimization(SAP S/4 HANA)

- · Simulated manufacturing and logistics for 15 products, using Tableau and SAP for real-time scheduling and forecasting
- Improved production decisions and demand alignment, resulting in a 33% increase in simulated profit.

Supply Chain Network Flow Modelling for Chemical Foam Manufacturers

- Built a MILP model for facility location, reducing projected logistics and fixed costs by \$21M across 15 nodes.
- Applied stochastic Newsvendor model to optimize inventory levels and improve service rate by 18%.

Inventory Cost Optimization

- Streamlined BOM using ABC-XYZ and EOQ analysis, enabling JIT for 42 low-turn SKUs and improving stock efficiency.
- Executed markdown strategy, cut carrying costs by 28% and recovered \$35K working capital from obsolete inventory.

Road Accident Analytics Dashboard (Tableau)

- Built Tableau dashboard with UK STATS19 data using geospatial clustering and severity segmentation for risk analysis.
- Added temporal heatmaps and dynamic KPI filters to enable multidimensional analysis of accident trends.

EDUCATION

University of Wisconsin-Madison, Madison, WI

- MS Industrial Engineering Systems Engineering and Analytics
- Graduate Teaching Assistant Manufacturing: Polymer Processing and Engineering

Kumaraguru College of Technology, Anna University, Coimbatore, India

· Bachelor of Engineering - Mechatronics Engineering

Expected Dec. 2025 GPA: 3.67/4.0

Aug. 2024 -Dec. 2025

Jul. 2016 – Apr. 2020

GPA: **7.6/10**

TECHNICAL SKILLS

Core Skills: Lean manufacturing, 5S, Kaizen, Process Optimization, Fixture and Tooling design, DFM, DFMEA, GD&T, NPI, Production Planning, Time and Motion studies, Takt time, Line balancing, VSM, Process Validation, RCA, FMEA, SPC, GR&R, CAPA, ERP systems, Change Control, Quality Systems, Documentation, Cross-Functional Collaboration

Software: SolidWorks, Creo, AutoCAD, Windchill, ProPlanner, SAP ERP, S4 HANA, SharePoint, Power Apps, Power Automate, Excel, Tableau, Power BI, R Shiny, MATLAB, Python, SQL, Minitab, COMSOL, LabVIEW

Certifications: Six Sigma Yellow Belt (LinkedIn)

LEADERSHIP EXPERIENCE

· Led cross-functional team of 17 across supply chain, sales, and service to align inventory planning with operational goals.