

Education

Northeastern University, Boston

Master of Science in Advanced and Intelligent Manufacturing

Course Work: Manufacturing Process Design Engineering, Digital Manufacturing, Leadership Program, Lean Concepts and Applications & Intelligent Manufacturing

May 2026

GPA: 3.82

SRM Institute of Science and Technology, Chennai

Bachelor of Technology in Mechatronics Engineering

Course Work: Control Systems, Manufacturing Methods, and IIoTs.

May 2022

GPA: 3.68

Skills

Manufacturing: Operational Excellence, Process Improvement, Daily Management Systems (DMS), Total Productive Maintenance (TPM), Lean Methodology, Automation Systems & IoT Integration

Automation: Simio, MATLAB, SolidWorks, AutoCAD, SAP 7.8, GX Works

Data Analysis: SAP 7.8, Python Excel, PowerPoint & Root Cause Analysis

Systems: Windows, Linux, & Google Workspace

Soft Skills: Cross-functional Collaboration, Communication, Teamwork, Leadership, Problem Solving & Analytical Thinking

Work Experience

Team Manager - Hero MotoCorp, Haridwar & Tirupati, India

Jul 2022 - Aug 2024

- Spearheaded Kaizen projects and implemented predictive maintenance systems, reducing downtime by 83% for CNC and PLC machinery.
- Contributed to conveyor automation in the weld shop by integrating welding robots, saving approximately ₹9,000,000 annually by reducing manpower requirements by two employees.
- Implemented tool cost reduction strategies and machine-level improvements, saving ₹28 per vehicle and extending machine life by five years with a minimal investment of ₹5,000.
- Digitized maintenance systems and optimized SAP-based Material Requirements Planning (MRP) processes to mitigate risks and improve resource management.
- Played a key role in Vida Electric Vehicle production by ensuring efficient plant operations through fixture optimization and automation programs.

Intern - Bosch Rexroth, Ahmedabad, India

May 2019 - Jun 2019

- Analyzed hydraulic circuits and collaborated on fluid power system designs for high-speed automated manufacturing equipment.
- Gained hands-on experience with valves, actuators, and pneumatic technologies applicable to automotive production lines.

Projects

Optimization of Manufacturing Line Using Simio, Northeastern University Boston

Nov 2024

- Optimized manufacturing processes using Simio simulation modelling, reducing cycle time by 15-20% and increasing WIP levels from 7,800 to 9,800 units through dynamic buffer management and worker allocation.
- Developed an IoT-enabled Smart Cell Dashboard integrated with Limble CMMS, improving machine availability (e.g., Honing machine from 75% to 86%) and reducing downtime by 8-10% using predictive maintenance aligned with TPM principles.

Comparison between Bang Bang, PID, and LQR Controller in EDM Process, SRM Chennai

May 2022

- Conducted a comparative analysis of Bang Bang, PID, and LQR controllers in Electric Discharge Machining (EDM), improving machining accuracy by 15% and reducing process variability by 10% using MATLAB simulations that demonstrated how optimized controllers could enhance precision and efficiency in EDM processes by up to 20%.

Certifications

- Implementing a Process Automation Strategy
- Lean Six Sigma White & Yellow Belt Certification
- Digital Manufacturing & Design Technology Specialization
- Introduction to Operations Management
- Data Analysis and Root Cause Analysis in Six Sigma
- Lean Tools and FMEA