HENRY FORD

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EXPERIENCE

Senior Industrial Engineer, *Ford Motor Company*, Detroit, MI   Aug 2024 - Present
- Lead improvement of vehicle assembly systems across multiple production programs.
- Work with production, maintenance, quality, and supply chain teams to find bottlenecks and implement solutions using lean problem-solving methods.
- Create process layouts, ergonomic workstations, material-flow plans, and line-balancing models.
- Present design plans, performance results, and risk assessments to plant leadership to secure approvals for equipment and workflow changes.
- Lead automation planning, reliability improvements, and production system stability across assigned lines.

Principal Industrial Engineer, *General Motors*, Detroit, MI   Nov 2018 - Jul 2024
- Designed manufacturing systems for electric-vehicle components using AutoCAD and simulation tools, producing designs installed across multiple plants.
- Led engineering teams of 8–12 people and guided projects from concept through installation while meeting quality and safety requirements.
- Improved cycle times, reduced ergonomic risks, and optimized material handling across several production lines.
- Built predictive-maintenance and reliability models that increased equipment uptime.

Senior Operations Engineering Manager, *Detroit Medical Center*, Detroit, MI   Sep 2016 - Oct 2018
- Managed operations engineering across 15 clinical departments, focusing on workflow, capacity, and equipment use.
- Developed predictive-maintenance and monitoring systems that significantly improved equipment uptime and reduced emergency repairs.
- Led engineering support for regulatory audits, capital planning, and Joint Commission reviews.
- Conducted process-improvement projects that reduced response times and operational disruptions.

Industrial Engineer I, *Detroit Medical Center*, Detroit, MI   Aug 2015 - Sep 2016
- Supported daily operations by analyzing department workflows and identifying delays and inefficiencies.
- Helped update maintenance schedules, equipment logs, and performance dashboards.
- Completed time studies, space-use analysis, and supply-chain reviews to support process improvements.

Industrial Engineering Intern, *Delta Manufacturing*, Detroit, MI   May 2014 - Aug 2015
- Supported time studies, workflow mapping, and basic layout updates for assembly operations.
- Helped track downtime, scrap, and quality issues, preparing weekly summaries for engineering supervisors.
- Updated standard-work charts and collected data for early lean-improvement efforts.

EDUCATION

BSIE, *University of Michigan*, College of Engineering   May 2015

SKILLS

- **Design:** AutoCAD, SolidWorks, Siemens Plant Simulation, MOST, Ergonomics, Material Flow Design, Facility Layout, DFM/DFA, Line Balancing, PFMEA, Automation Planning
- **Analysis:** Python, MATLAB, Minitab, JMP, Reliability Modeling, Discrete-Event Simulation, Statistical Process Control, Data Visualization, Excel