

Professional Summary

Results-driven Mechatronics Engineering student with expertise in automation, CNC machining, and AI systems. Skilled in optimizing processes, leading teams, and delivering technology-driven solutions under pressure. Passionate about leveraging engineering expertise to solve complex challenges and contribute to innovative, forward-thinking organizations.

Professional Experience

Lumber Associate, Home Depot, London, Ontario April 30 – Current

- Enhanced customer satisfaction by 95% through expert project advice, streamlining customer builds and improving productivity.
- Boosted department performance by 10% through the effective training of new associates in customer service and safety standards.
- Increased repeat customers by 25% by providing accurate product recommendations to over 150 customers weekly.

CNC Machinist, A-line Precision Tool Ltd., Ontario March 23 – Aug. 2023

- Increased efficiency and profitability by 22% with optimized tool paths and machining precision.
- Drove a 15% boost in productivity by adhering to blueprint specifications in high-speed aerospace part machining reflected in weekly performance reports.
- Mentored new employees in CNC operations, improving team competency and operational excellence.

Associate Sales Manager, Kissan Engineers, Punjab, India June 21 – April 2022

- Kissan Engineers, a casting business based on manufacturing of iron and steel machine parts, steel pipe joints, etc., which are inspected and sold to clients.
- Streamlined inventory, production, and transaction processes, increasing overall business efficiency by 27%.
- Generated \$35,000 in new revenue within four months by revamping product displays and launching online client viewing.

Core Skills and Certifications

- Technical Skills – GD&T interpretation, AutoCAD Drawings, SolidWorks, Mastercam, Tolerance Analysis, Precision Machining, Non-Destructive Testing, CNC Machining, MATLAB, Java, Data Structures & Algorithms.
- Non-Technical Skills – Project Management, Organisational Efficiency, Effective Communication, Sales, Versatility, leadership and decision-making.
- Certifications – Certified SolidWorks Associate (CSWA)

Projects

WE Mars Rover Club, Mechanical & Software Division Sept. 23 - Current

- Designing multiple iterations for the wheels and rocker-bogie suspension in SolidWorks leading to a stable and flexible system, achieving 35% improvement in maneuverability.
- Developed and integrated advanced camera systems for optimizing video data capture and real-time processing; implemented UDP for enhanced data transmission efficiency, vital for precise navigation.
- Collaborated with controls team to ascertain the effective microprocessor for use in embedded systems to improve response time and seamless connectivity for all parts.
- Partnered with the controls team to simulate and validate microprocessor functionality using Java-based test frameworks, ensuring seamless interoperability within rover's architecture.

Western Baja Club, Suspension Division Sept. 23 - Current

- Conducted research to develop new suspension systems helping to improve stability by 28%.
- Redesigned Chassis and cage for 28% improvement in structure integrity through stress analysis.
- Designed and tested transmission components to enhance power delivery efficiency and drivetrain reliability during off-road operations.

Education

Bachelor of Engineering, Western University Sept. 23 – Current

- Dual Major in Mechatronics Systems Engineering and Artificial intelligence.
- Critical Courses – Neural networks, Optimisation, ML/AI systems.

Diploma of CNC Operator and Programmer, Institute of Machine Tool Technology Sept. 22 – July 23

- CNC Mill and Lathe Operations on FANUC machines.
- SolidWorks for product designing and Mastercam for Toolpath input for precision machining.