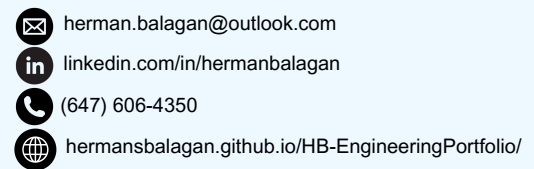


HERMAN S. BALAGAN



SUMMARY

Mechanical Engineering student with 2+ years of experience in manufacturing, design, and project management. Proficient in AutoCAD, SAP, SolidWorks, and ANSYS Fluent. Led \$1M+ projects, optimized system performance, and ensured 100% regulatory compliance. Skilled in failure analysis, energy efficiency, and cross-functional collaboration to drive cost savings, innovation, and operational excellence in high-pressure environments.

EXPERIENCE

General Motors Canada | Mechanical Engineering Co-op | Oshawa, ON

Sept 2023 - Sept 2024

- Spearheaded major projects valued at \$1M+ across the Oshawa Campus using AutoCAD, SAP, and Ariba.
- Planned the execution of Oshawa Data Center Energy Cost Savings Initiative, collaborating with cross-disciplinary teams.
- Conducted and documented natural gas and hydrogen system audits, ensuring 100% compliance with regulations.
- Performed Failure Modes and Effects Analysis (FMEA) for fire main replacements and natural gas conversion.
- Developed funding reports and proposals, securing \$500K+ in funding for critical GM plant operations.

Modern Niagara Group | Mechanical Engineering Co-op | Toronto, ON

Aug 2021 - Aug 2022

- Analyzed and interpreted 3D engineering models to track onsite building system installations.
- Reviewed and updated engineering drawings, ensuring 100% compliance with project requirements.
- Coordinated equipment release and material handling, reducing delays by 15% through optimized scheduling.
- Managed subcontractor responsibilities, ensuring timely project completion with a zero-incident track record.
- Created vendor reports for equipment procurement, improving cost efficiency and delivery timelines.

Design Test and Balance | HVAC Technician | Richmond Hill, ON

June 2020 - Sept 2020

- Conducted 50+ safety tests to verify heat pumps, AC motors, and fans met design capacity.
- Diagnosed and repaired deficiencies in HVAC systems, improving operational efficiency.
- Updated CAD drawings with the latest design specifications based on tested results.
- Installed and performed routine maintenance on commercial air conditioning, ventilation, and heating systems.
- Measured and adjusted airflow levels, balancing HVAC systems for optimal performance and full compliance.

TECHNICAL SKILLS

Programming: Java, Python, C, C#, JavaScript, MATLAB

Platforms: Linux (Ubuntu, Slackware, Debian), Microsoft Office Suite, BIM 360, SAP, Ariba

Hardware: Raspberry Pi, LaunchPad, FPGAs, Logic Analyzer, Arduino, PLC

Software: AutoCAD, SolidWorks, NI LabVIEW, ANSYS Fluent, Revit, StarCCM

EDUCATION

York University - Lassonde School of Engineering | Toronto, ON

Sept 2019 - Present

Honours Bachelor of Mechanical Engineering

GPA (4-Point Scale): 3.8

EXTRACURRICULARS

Lassonde Motor Sports | Drivetrain Team Lead | Toronto, ON

Sept 2022 - Dec 2024

- Designed automotive drivetrain systems, meeting engineering specifications and performance benchmarks.
- Performed stress testing using SolidWorks, reducing drivetrain weight by 10%.
- Implemented drivetrain enhancements, improving system efficiency.
- Collaborated with cross-functional team leads to ensure on-time project milestone delivery.
- Led fabrication and assembly efforts, ensuring drivetrain components met safety and performance standards.