Emily D'Silva

University of Waterloo | Mechatronics Engineering

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https://luluthedeveloper.github.io/

Work Experience

Manufacturing Engineering Co-op | Martinrea Tillsonburg | May 2025 – August 2025

- Designed, manufactured, installed, and tested an ejection system for sheet metal pieces in 9 different sub cells which previously caused over 2 and a half hours of downtime
- Modified tooling on a two large subassembly stations for a relocation of spot welds to increase jobs per hour (JPH) by 11.8 and reduce cycle time by 4.5 seconds
- Designed two separate mechanical and electrical part placement validation systems to ensure welds were properly aligned, saving over $580 in lost parts

Library Assistant | Uxbridge Public Library | September 2023 – August 2024

- Shelving library materials, organizing shelves, and aiding patrons

Skills

CSWA | SolidWorks – Modeling 3D parts and implementing designs into assemblies

GMAW Welding – Fundamentals of welding, created a sculpture of a scorpion using nuts, bolts and washers

AutoCAD - 2D modeling skills including proper dimensioning practices and sketching orthographic views

Programming Languages - C++, Python, PHP, MySQL, HTML, CSS

Projects

Robot Design | Lead mechanical designer of a team to fabricate an autonomous LEGO pipe cleaning robot

PHP & MySQL | Created a Zork inspired game in PHP including a MySQL database for saving data

Experiences

Level 9 Practical Piano - Royal Conservatory of Music | 2011 - 2024

Shotokan Karate 1st Dan Black Belt | Community Martial Arts | 2016 - 2024

Schulich Leaders Nominee | 2024

Education

University of Waterloo 2024 – 2029

- Bachelor of Applied Science | BASc, Mechatronics Engineering