Thomas Watson

506-651-4141 | thomaswatson1188@gmail.com | linkedin.com/in/thomaswatsonn | Portfolio

EDUCATION

Dalhousie University

Halifax, NS

Bachelor of Mechanical Engineering, Minor in Computer Science

Sept. 2021 - Apr. 2027

EXPERIENCE

Cybertruck GA Equipment Engineering Intern

Sept 2025 – Present

Tesla

Austin. TX

- Led mechanical design, robotics, and PLC logic for two new seat structure assembly cells; sole designer/programmer of rejection assembly, saving hundreds of thousands annually in Cybertruck development lead time.
- Main contact for seat assembly cells; designed/implemented efficient robotic fittings, controls, and end effectors using Siemens NX, SolidWorks, and Catia.

Mechanical Design Engineering Intern

May 2025 – Aug. 2025

Lockheed Martin

Dartmouth, NS

- Led topside design initiatives, implementing 9 new functional equipment placements based on antenna radio frequencies, thermal considerations and mechanical constraints.
- Led topside mechanical design assembly integration for confidential system as main point of contact for 4 vendors.
- Identified discrepancies and led the redevelopment of a company-wide new line-of-sight analysis procedure using SolidWorks for the CSC program, trained employees, and improved process accuracy by over 8%.

Aerodynamics/RF Engineering Intern

May 2024 - Aug. 2024

Lockheed Martin

Dartmouth, NS

- Developed and validated a calculation method for engine exhaust mass flow rates/temperatures, worked with vendors to develop proper idle engine power distribution for RANS/LES simulations (thermal and aerodynamic).
- Worked closely with the Electromagnetic/RF team validating near and far field antenna coupling analyses.
- Developed, meshed, and analyzed CSC ship model iterations for CFD using ANSYS Fluent and SolidWorks.

Aerospace Engineering and Logistics Intern

Jan. 2025 - Apr. 2025

RTX (Pratt and Whitney)

Halifax, NS

- Collaborated with PW800 production line and automated various procedures using VBA, Power BI and Python.
- Built 13 complex Visual Basic macros from scratch, cutting company data refresh time by 8 hours/week.

Projects/Extracurricular Leadership

Video Game Console System | Matlab/Arduino with 3D Printed Controller

May 2025

• Developed a front to back end 2-D video game system using an Arduino Uno (Analog/Digital Input) and Matlab, governed by RK4 differential equations. 3-D printed a custom designed ergonomic controller assembly.

Quantitative Risk Management App | Dalhousie Investment Society (DALIS)

Sep. 2024 – April 2025

- Built a ground-up application that calculates individual group and society-wide YTD PNL's in Python using Pandas, Matplotlib, Tkinter and Bloomberg's Python API.
- Introduced applied mathematical hedging and decision making to the society. Developed Monte Carlo simulations and stock/industry corelation matrices using python (Matplotlib, Numpy and Pandas).

Head of Governance and Trading | Dalhousie Blockchain Society

Dec. 2024 – Present

- Leading team governance initiatives, managing and presenting club votes on various L1/L2 Web 3.0 projects.
- Obtained an all expenses paid grant to attend Jupiter Exchange's annual conference in Istanbul, Turkey.

Volunteer Experience

Dec 2020 – Present

- Dal Engineering vs Commerce Charity Hockey Game Raising over \$60 000 for the Canadian Cancer Society.
- Summer youth hockey development camp coach.
- Romero house Saint John food shelter volunteer.

TECHNICAL SKILLS

 $\textbf{Engineering:} \ NX, \ Catia, \ Python, \ Solid Works, \ VBA, \ VLSI \ design, \ Simulink, \ Auto CAD, \ MATLAB, \ Java, \ C++$

Tools: Tableau, Power BI, DOORS, SAP, Visual Basic, SQL, Confluence, Jira, Bluebeam, Git

Simulation: ANSYS Fluent, COMSOL Multiphysics, ShipEDF (3D RF/Electromagnetic Modeling), OpenFOAM

Relevant Courses: Heat Transfer, Fluid Mechanics, Systems, Materials 1-3, FEA, Applied ODE's, Machine Design 1-2