## **ADYN MILES**



adynmiles.github.io/adynmiles

## **EDUCATION**

## Delft University of Technology

Master of Aerospace Engineering

September 2022 - June 2024 (Expected)
8.4/10 Average

#### **University of Toronto**

Bachelor of Aerospace Engineering September 2017- April 2022 3.82/4.00 GPA

Thesis: Hybrid Magnetic and Impulsive Control for Earth-Observing Satellites

### **EXPERIENCE**

#### University of Toronto Aerospace Team

May 2018 - Mar. 2022

Payload Chief Engineer and Systems Engineer

- Led the development of a hyperspectral camera onboard a nanosatellite for greenhouse gas emissions research.
- Developed architecture, requirements, and full verification plan.
- Led integrated testing campaign including vibrational and thermal testing.
- Developed software base for a ground station using GNURadio.
- Assembled a satellite for launch in a cleanroom.

#### Space Systems Design Capstone

Sep. 2021 - Dec. 2021

Chief Systems Engineer

- Led the systems design for a 1st-place winning asteroid mining concept presented to MDA Space.
- Developed full requirements and architecture.
- Performed thermal and link budget analysis on the design.

#### Canadian Space Agency

May 2021 - Aug. 2021

Software Development Intern

- Developed a ground simulator for the currently operational NEOSSat to diagnose issues and develop better software.
- Added critical payload functionality to the main program using a real time operating system.

#### **Bombardier Aerospace**

Aug. 2020 - Apr. 2021

Stability and Control Intern

- Developed tools to organize and use large drag performance datasets to better understand production quality trends.
- Used MATLAB-based simulations to ensure the aircraft could withstand uncontrolled thrust conditions.

# RELEVANT COURSES

Space Systems Engineering

Space Optical Sensors

Spacecraft Structures Design

Microsatellite Engineering

Spacecraft Attitude Control

Planetary Sciences

## **SKILLS**

LANGUAGES (Experience)

English (Native)
French (5 years)
Dutch (< 1 year)

#### SOFTWARE LANGUAGES

Python (6 years)
MATLAB (5 years)
Embedded C/C++ (1 year)
VBA (1 year)

#### **TOOLS**

SolidWorks CAD (2 years)
PyTorch (3 years)
Arduino (1 year)
Raspberry Pi (1 year)