ADYN MILES

A.A.Miles@student.tudelft.nl

adynmiles.github.io/adynmiles

EDUCATION

Delft University of Technology

Master of Aerospace Engineering

September 2022 - July 2024 (Expected)

8.5/10 Average

Thesis: Design and assembly of a spectropolarimeter for the study of planetary surfaces

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

Master's Thesis — Oct. 2023 - Present

Space Instrumentation Scientist and Engineer

- Leading the design and assembly of a lab-based instrument for spectropolarimetric measurements of planetary analogues.
- Defined full requirements and architecture.
- Developing calibration and characterization procedures for the instrument.
- Performed full performance simulation in Zemax and Python.

Planet Labs — Jun. 2023 - Sep. 2023

Payload Systems and Test Engineering Intern

- Designed and documented assembly and testing procedures for detector and lens alignment across multiple payloads.
- Assembled lab-based optical payload prototypes for these tests.
- Developed tools to verify requirements for current Planet satellites.

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.
- Assembled a satellite for launch in a cleanroom.

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.

RELEVANT COURSES

Space Systems Engineering

Micropropulsion

Spacecraft Structures Design

Microsatellite Engineering

Spacecraft Attitude Control

Space Embedded Systems

SKILLS

LANGUAGES	(Experience)
English	(Native)
French	(Intermediate)
Dutch	(Intermediate)

SOFTWARE	
Python	(7 years)
MATLAB	(6 years)
Embedded C/C++	(1 year)
SolidWorks CAD	(2 years)
LabVIEW	(<1 year)

LABORATORY	
Optical Bench Testing	(2 years)
Arduino	(1 year)
Cleanroom Assembly	(<1 year)
Electrical Testing	(<1 year)
Soldering	(<1 year)