

DYLAN COOPER

dylancooper1504@gmail.com | 07928614575 | Bournemouth, BH23 7JF

<https://www.linkedin.com/in/dylancooper1504> | <https://github.com/cooperdylan19>

A recent Master of Physics graduate with strong analytical and problem-solving skills, experienced in data modelling and statistical analysis, and proficient in Python, C, and MATLAB. Through personal and academic projects, I have applied both soft and hard systems engineering disciplines, and I am eager to bring these capabilities to Sirius Analysis, contributing to the successful delivery of technical consulting projects through innovative and impactful solutions.

EDUCATION

Master of Physics (2:1), University of Bath Oct 2021 – Jun 2025

- **Relevant modules:** mathematical methods (92%), vector calculus (88%), fluid dynamics (76%), computational astrophysics (72%), and experimental physics and data analysis (72%)

A-Levels and GCSEs, Ringwood School and Sixth Form Sep 2013 – Jun 2020

- 3 A-Levels in Mathematics, Physics, and Biology (A, A, B)
- 10 GCSEs including Mathematics (8), Double Science (8, 7), English Language (5), and English Literature (7). 1 BTEC in IT User skills (B)

EXPERIENCE

Computational Research Scientist Sep 2024 – Jul 2025
University of Bath Bath, Somerset

- Investigated long-term trends (2015–2024) in anthropogenic noise in Cambridge Bay (Canada) and evaluated the suitability of the MSFD shipping frequency bands in Arctic environments. Findings presented at *UACE2025*; article publication to *Nature* projected for 2026
- **Technical skills developed:** Research, large dataset analysis (5.3 TB), data processing in MATLAB, data processing and visualisation in Python, building reports in LaTeX, fluency with the Microsoft suite
- **Interpersonal skills developed:** Time management, organisation, teamwork, communication, presenting

Creating a functional fluid solver to model a spherical explosion Mar 2024 – May 2024
University of Bath Bath, Somerset

- Solved Euler's equations using numerical methods (Lax–Friedrichs scheme, HLL and HLLC method). Recast equations using spherical coordinates to accurately represent physical explosions in space
- **Technical skills developed:** Data analysis in C, modelling, building reports in Microsoft Word
- **Interpersonal skills developed:** Time management, organisation, collaboration

Shift Leader Jun 2023 – Oct 2025
Holmsley Campsite Christchurch, Dorset

- Responsible for opening and closing the shop. Administered cash reconciliation. Led shifts where I handled customer complaints, amended till issues, and ensured the shop was well maintained
- **Technical skills developed:** Inventory management, maintaining cash transaction records
- **Interpersonal skills developed:** Teamwork, delegating tasks, customer service

LEADERSHIP

- Captain and Manager of the University Physics Football Team, leading a squad of around 30 players. Organised training sessions, selected the match day squad, and coordinated 12 competitive fixtures, working closely with the league coordinator
- Young Leader at 3rd Christchurch Scout Group. I led and organised activities at camps and weekly meetings, teaching Scouts practical skills including pitching green ridge tents, knot tying, fire starting, and cooking

COMPUTATIONAL SKILLS

Python	Experience using: numpy, pandas, matplotlib, scikit-learn, math, scipy, os, json
C/C++	Experience using: stdio, string, stdlib, math, time, stdbool
Excel	Experience with PivotTables, filtering tools, VLOOKUP, XLOOKUP and IF statements