# **David Stone**

St Oswald's Orchard, Oswaldkirk, York, YO62 5XT

Graduate aerospace engineer having recently completed the fourth year of a master's degree. Hard working and self-motivated, with strong technical, analytical, and interpersonal skills for working in a team and efficiently completing a task.

## **Education**

Academic Qualifications.....

University of Bristol

MEng Aerospace Engineering, First Class

Ripon Grammar School

A Levels, Mathematics (A\*) Further Mathematics (A) Physics (A) French (B)

Ryedale School

GCSEs, Biology (A\*) Chemistry (A\*) English Language (A) English Literature (B)

French (A\*) Geography (A\*) Maths (A\*) Music (A) Physics (A\*)

Notable Projects....

- o Final Year Research Project: 'Multi-UAV Search and Rescue'
  - Continuation of MATLAB based 3rd Year Project and Summer Internship.
  - Developing strategies to perform Multi-UAV search and rescue missions.
  - Project showcased at the Art of Science 2019 exhibition.
- o 4th Year Group Design Project: 'New Short-Range Airliner Family'
  - Member of a 9 person team producing a comprehensive design of two airliners.
  - Design was presented to a panel of specialists from Airbus for evaluation.
  - Winning team at the Final Design Review awarded for best design, presentation, and response to questioning at the technical poster session.
- o Summer Internship: 'MATLAB Based UAV Control'
  - Research Internship was a continuation of my third year individual exploratory project.
  - Primary focus was to integrate onto a real UAV, and then develop a MATLAB simulation I had coded during my third year project.
  - MATLAB code successfully planned search paths and commanded a drone using Mission Planner.
  - Ability to command the drone to perform actions such as arming, taking off, and switching flight modes was developed and tested in an indoor netted arena.
- o **3rd Year Individual Project:** 'Path generation and following algorithms for UAV assisted wilderness search and rescue missions'
  - A challenging project that took place over the entirety of my third year.
  - Required excellent planning and organisational skills, and the ability to investigate, plan, and prepare a piece of original research relevant to my degree.
- o Computational Aerodynamics C++ Project: 'Coding a finite-difference and finite-volume scheme for a two-dimensional non-linear wave equation'
  - Wrote a code to use numerical methods learnt from the course, to give approximate solution of PDEs relevant to aerodynamics/fluid dynamics.
  - Built on knowledge from 1st Year C-Coding Module to write a code primarily in C, with C++ used for input/output. OpenGL was used to obtain graphical output.

- Learnt how to convert numerical methods to high level code and experienced the process of logical bug identification.
- o 2nd Year Group Project: 'Aircraft Wing Design, Build, and Test'
  - A large group project during the 2nd year of my course to design, build, and test a 1.5m wingspan aluminium wing.
  - Worked with a team of 28 people operating as a team leader.
  - Responsible for organising sub-teams, and co-operating with various other sub-team leaders to create a design that met the requirements of the task.

# **Previous Experience**

#### University of Bristol Drone Society

**Bristol** 

Vice President

March 2018-June 2019

- After 6 months in the role of treasurer I was elected to be Vice President of the society.
- So far this role has involved organising and producing promotional material for the society, planning events, and helping to coordinate the construction of a flying arena.

# University of Bristol Drone Society

Bristol

Treasurer

October 2017-March 2018

- In charge of overseeing the society budget and approving purchases and expenses on behalf of the society.
- Jointly responsible for managing an £11,000 budget for an industry sponsored event we ran in collaboration with two other societies.

Moorside 4X4 Kirkbymoorside

Land Rover Mechanic

July 2014

- Spent a week doing work experience at Moorside 4X4, gaining a detailed insight into the end product that engineering creates.
- One of tasks was to strip down the gearbox of a Series 1 Land Rover to clean, repair, and replace worn parts.

Quasar Automation

Mickley
October 2013–April 2014

- EDT Engineering Education Scheme
- One of four students in the school to be selected for The Engineering Education Scheme.
- Project involved the use of robotics to automate a manufacturing process, and for which I achieved a Gold Crest Award
- Gained the highest score for originality towards solving a problem, a score only managed by one in fifty teams.

### Technical and Personal skills

o **Programming Languages:** Proficient in: MATLAB, LATEX Also experience with: C, C++, HTML.

- o **Industry Software Skills:** Inventor (Advanced), MATLAB (Advanced), XFOIL (Advanced), Nastran/Patran (Intermediate), Many MS Office products (Advanced).
- o **Other:** Good soldering skills, can write well organised and structured reports. Full, clean driving licence, held for over three years.

# Interests and extra-curricular activity

o In my spare time I enjoy climbing and mountaineering. I have completed a Scottish Winter Mountaineering course and have been involved in several trips abroad to pursue my passion internationally.

#### References

o Available on request