

# Daniel Murphy

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Hardworking Mechanical Engineering (MEng) graduate with 1-year experience as an Undergraduate Software Engineer at Jaguar Land Rover. Seeking a Junior Software Engineering role to utilise proven skills in back-end development.

## Education

*University of Southampton, 2016-2021*

Mechanical Engineering Automotive Themed with Industrial Placement Year (MEng)

Graduated with First Class Honours.

Relevant Modules:

- Advanced Computational Methods: Achieved 91% in this C-based programming module.
- Group Design Project: Lead Electrical Power System (EPS) Engineer for the University of Southampton Small Satellite Program
  - Redesigned the architecture of the EPS software module.
  - Spearheaded a complete rewrite of the EPS module (in C).
  - Completed integration testing between the EPS module and main software module for the first time in the project's history.
- Individual Project: Investigating the Performance and Implementation of Low-Cost Air Quality Monitoring Systems in Southampton
  - Designed and prototyped a low-cost air quality monitoring system with a budget of £100 based on a Raspberry Pi.
  - Devised a Python script that enabled the Pi to gather and store pollutant concentration data.

*St Bernard's Catholic Grammar School, 2009-2016*

### A-Levels

Mathematics: A\*

Physics: A\*

Chemistry: A

Business Studies (AS): A

### GCSEs

Mathematics: A\*

Additional Science: A\*

Spanish: A\*

German: A\*

English Literature: A

English Language: A

Religious Studies: A

History: A

Core Science: A

Physical Education: B

## Experience

*Undergraduate Software Engineer: Jaguar Land Rover (June 2018-2019)*

- Designed, prototyped and programmed an Arduino-based ECU Fault Induction box that could simulate 120+ faults which revolutionised ECU warranty testing.
- Designed and implemented a new hardware in the loop rig setup to maximise space and minimise time wasted connecting various units, allowing the rig engineer to more efficiently utilise her time.
- Wrote clear, concise code in C, C++ and Python in a team using the scrum agile methodology.
- Extensive testing and debugging of software on the rig before vehicle testing began.

*Work Experience: Red Bull Racing and Technology (September 2016)*

- Undertook training in CAD and prototyping models in the aero model and design workshops, skills which I used throughout my degree.
- Developed my skills in budgeting and using accounting software in the finance office.

## Skills

Programming proficiency in C, C++, Python and Javascript.

Basic programming experience in HTML and CSS.

Basic German knowledge.

Experience in budgeting for projects.

Good communication skills.

Extensive experience with MS Office.

Experience designing bespoke solutions.