



**Student:** Jacob Maresca

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**Placement:** FAAM (Facility for Airborne Atmospheric Measurements)

**Role:** Designing a turbulence probe

*"I have learned new skills and developed existing ones. I have gained work-place experience and a better idea of the types of jobs that are out there."*

### Describe a typical day:

A typical day might involve developing software using LabVIEW to communicate with hardware and testing to check that it behaves as expected. I also spent a significant amount of time building a working prototype of a 5-hole turbulence probe, which required me using practical skills as well as theoretical ones. The turbulence probe can be used to measure differential pressures in perpendicular planes, allowing the calculation of 3D wind velocities.

### Why did you decide to do a placement?

I wanted to further explore ideas for what to do after I have finished studying, specifically in a field that uses the skills I am learning. My placement challenged me to learn a new programming language and to apply my knowledge to new problems. For example, I had to develop a method and piece of software for calibrating the hardware I was working with.

### Would you recommend doing a placement?

Absolutely, my placement was really enjoyable and I learned a huge amount. I had the opportunity to work with a wide range of people over the course of my placement, gaining the benefit of their experience. This also allowed me to develop good communications and team-working skills. It is an excellent opportunity to make connections outside of university.

### How do you think doing a placement has benefited you for the future?

I have learned new skills and developed existing ones. I have gained workplace experience and a better idea of the types of jobs that are out there.

### What are your next steps?

I intend pursuing a PhD in physics (weak gravitational lensing).