



**Student:** Benjamin Mawdsley, University of Portsmouth

**Placement:** Earth-i

**Role:** Tech Intern

(Now a Data Scientist at the Hartree Centre)

*“Do not be afraid to apply for a placement just because you feel like you lack some of the experience – it is the point of the placement to gain that experience after all!”*

**What is the subject of your PhD?**

I am using weak gravitational lensing measurements to produce maps of the dark matter in the Universe and using these maps to infer cosmological properties.

**Describe a typical day on placement**

My placement was in the technology team at Earth-i, a company specialising in geospatial intelligence. Using satellite imagery and machine learning software, they are able to create new products for a variety of applications. I chose to work as part of the ACCORD programme which helps coffee farmers in the developing world. I was using satellite imagery to construct a neural network in Python to identify the location of coffee fields and then using this to try and extract information about the health of the fields.

**What skills and knowledge have you gained during the placement?**

I used a variety of software packages that were new to me, to analyse and process the imaging data and managed to get a lot of experience in developing a machine learning pipeline. I found being able to dedicate myself to learning these new skills full time was much more efficient and fulfilling than the shorter study sessions on similar topics that I had previously done in my spare time. The placement was also useful for exploring a commercial environment in a sector that I was unfamiliar with and to experience how a data scientist fits into the broader activities and expertise in a company.

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

The internship helped me to better understand the skills and experience that employers are looking for in a data scientist, by giving me a familiarity with the industry. This made me more informed when I was filling in job applications, and gave me much more confidence in interviews.

**What advice would you give to a PGR student who might be interested in seeking a placement?**

Try to find a role where you can use some of the skills you already have, but also try and find something outside your comfort zone. The placement was a great chance to take a few months to develop new skills and deal with new problems. Focus on finding a friendly and encouraging place to work that will help you develop these new skills. The employers are looking for your new ideas and fresh approach to problems.

