



Student: Helen Davidge

The Open University

Placement: The Royal Marsden Hospital

Role: Reconstruction of radiation intensity measurements from time-based data

“I am hoping that the programming skills I have learnt while on my placement, my time spent on S2SD and the knowledge I have gained during my PhD will support me in getting a job as a data scientist.”

What is the subject of your PhD?

Observational Cosmology

Why did you decide to do a placement?

The role was similar to the type of work I did during my PhD. The main parts included reading up on the radio therapy unit and writing computer code. This placement would also give me the opportunity to improve my Python programming skills, necessary for the Pivigo S2DS (Science to Data Science) summer boot camp, which I am going to attend next.

Can you briefly describe the role?

The coding was split into creating a simple database to store current and previous experimental data and performing initial data reduction on the current experimental work and converting this into a data reduction pipeline. I read some useful science papers and write-ups of previous SEPnet graduate students' work. For the computer coding I used Python. One of my tasks, which was very different to my PhD work, was one evening a week I assisted with experiments on a radio therapy unit.

How do you think this placement has benefited you for the future?

I have enjoyed the structure of the work and valued the teamwork aspects of the role. Also, doing the London commute from my house for eight weeks and working a nine-to-five job, as well as line managing the undergraduate SEPnet intern has been useful experience. The experience has helped me identify that I am interested in programming. I have further developed my computer skills by gaining an intermediate level of coding in Python and learning the basics of the programming language R, as well as Linux.

What are your next steps?

I am planning to attend the Pivigo S2DS summer boot camp programme where I will get more experience of data science. Knowing the commute is do-able and enjoying all that the capital has to offer, I will be looking to work in London.

Employer perspective:

Helen brought and shared skills in terms of problem solving in addition to practical work in programming, working as part of a team and independently. Her attention to detail and perseverance in tackling new facets of the problem were exemplary. Getting a positive outcome from which to move on is an achievement in these short placements with the heavy time constraints of a hospital environment.