



Student: Tom Berry

University of Surrey

Placement: Wood Plc

Role: Software Engineer
(Nuclear)

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What is the subject of your PhD?

Experimental Nuclear Physics

Describe a typical day on placement

I work on my project all day! So largely writing code and testing that code. In between I have to plan what I'm doing next, work out how best to do it and meet with my supervisors to discuss progress and set goals. As a group we also like to discuss our individual projects, so we learn about other areas and can help each other to solve problems.

What skills and knowledge do you feel you have learned during the placement?

I've learnt a lot about programming – not just new languages but new techniques. I've learnt specifically about the reactor simulation codes and the role that they play in the nuclear energy industry. And I now have experience of working on a project in a collaborative environment with business goals and requirements to take into account.

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

It's been refreshing to take on a new and interesting project in a different research area. Previously I had no specialist work experience or references outside academia. My colleagues have been very knowledgeable and helpful, so they've taught me and given me advice on my future. I've gained experience of what it's like to work at Wood, in nuclear energy, and in software in general.

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

Take advantage of the support from the University/SEPnet while it's available. Talk to the Employability Advisors about the fields/employers you're interested in. It's a chance to learn new skills and learn about opportunities in a different field. I personally found it helpful to be able to pause the PhD funding so that my research wasn't affected.

Employer Perspective:

Students work on key development and application projects which deliver added value to Wood Nuclear. Tom successfully completed a project to develop an initial software and mathematical framework to couple a nuclear reactor physics model to a nuclear fuel performance model. This multi-physics coupled model is being expanded upon to deliver an exciting new capability aimed at improving nuclear safety and reliability.