What is the subject of your PhD?

Why did you decide to do a placement?
To gain real world experience and work in a team. Adaptix Imaging is a start-up at Begbroke Science Park and is developing a novel flat panel x-ray imaging source. Technology is being developed to improve low-cost x-ray imaging techniques which give a reduced radiation dose to patients and achieve a better diagnosis. One goal is to make the device portable and bring it to developing nations. The aims of this company were a great motivating factor to do this placement.

Describe a typical day on placement:
Everyday begins with a team meeting. It is vital that the hardware and software teams communicate effectively to improve the development of the imaging system. You have to be flexible in R&D because things move fast. The atmosphere can be exciting especially when the team have a successful result. For my project, it may been acquiring new imaging data from the lab or using that data to improve the imaging pipeline and characterise the instrumentation.

What skills and knowledge do you feel you have learned on the placement?
Creativity was required for developing “phantoms” for imaging. I furthered my data analysis skills and learnt to use image-processing packages such as ImageMagick. My communication skills were developed through regular meetings and I gained knowledge of medical imaging techniques. I learnt about business including the importance of understanding the market, having a long term plan for your product and the significance of intellectual property and patent writing methods for start-ups.

How do you think the placement has benefited you for the future?
As well as having gained many skills, I have learnt about working in an industrial and scientific setting in a start-up company.

What advice would you give a PGR student interested in a placement?
It’s important to look into the company first and see if its aims line up with your personal motivations. As well as the project itself, I really like the ethics and motivations behind Adaptix and how they are developing a device which will revolutionise medical diagnosis. The company has a lovely team where everyone feels involved and I got to use my physics knowledge a lot too.