



**Student:** Kiz Natt,  
The Open University and  
Rutherford Appleton  
Laboratory

**Placement:** Adaptix Imaging  
**Role:** Image Reconstruction  
Developer

*“As well as having gained many skills, I have learnt about working in an industrial and scientific setting in a start-up company.”*

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

Radio and Infrared Observations of the W3/W4/W5 Star-forming Regions.

**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 be 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.