

## Reflective Diary – Andrew Bainbridge

While working on this project I have experienced a different side to working in an academic environment that I haven't had during my degree. The project was open ended and allowed me to work on various tasks to reach the overall aim. This aspect was important for me because it meant that I was able to experience the range of tasks that need to be completed to make the project successful, and this also made my time more interesting than it would have been had I been doing the same task for the whole time.

I didn't have any specific expectations before I arrived, I knew the general focus of the project, but not what I was likely to be doing day to day. I was happy with this though and I was motivated to work on and enjoy any tasks that I would be set. Before jumping straight into the practical work, I did have to spend some time on background reading on the areas that the project would focus on; this was necessary to be able to understand and contribute to the tasks, but at the same time I was eager to get started on something practical instead.

Throughout the project I worked extensively with computer programs MATLAB and LabVIEW. Both of these programs are used considerably in practical research and I had a bit of experience with both beforehand, but not as much as I needed to be able to do everything I had to with them. However, this presented an opportunity to learn new skills that will undoubtedly be useful in my future work; I have gained a lot of experience with these programs that I will be able to apply to other tasks.

I was able to understand and work successfully on most of the tasks that had to be completed for the project. My supervisor offered useful guidance and help when needed, but then I still had to be able to work on the tasks independently. Some things I knew exactly what to do straight away, but others took more thought and research for me to be able to reach the target. As I didn't expect everything to always be easy for me this wasn't something that caused too many problems. There were frustrations at times when I struggled to get things to work as I wanted, for example I had to make various changes to the MATLAB script that I had written to get it working properly, but overall I was able to solve the problems had. This made the end result even better to achieve, knowing that it wasn't simple and easy.

One thing that I hadn't particularly considered before starting was the times that I would be working. I assumed that it would be starting at nine in the morning and leaving at five in the afternoon, but the department had a more flexible, relaxed approach to working hours. Since I had the freedom to choose when I started in the morning I generally chose to start earlier than nine; this meant that I could then have more time after finishing to do other things. Now that I have worked in this environment that I enjoyed, it will likely make me think about flexible working hours when applying for jobs. There is a definite benefit to it, and also an implied trust that you will be able to get the work done during the hours that suit you.

During my time in Cambridge I have learned that things don't always go according to plan, and this has made me a bit more patient in terms of how much I expect to achieve in a certain time. The biggest example of this that I had happen to me was having to wait for equipment that I needed. Near the start of the internship my supervisor ordered a power supply that would be needed for the project. It was expected to take up to about a week to be ready to use, but in the end took more than three weeks. Various delays in it being delivered and then being made ready to use meant that there was a gap between when I needed it for the main part of the project and when I actually had it

to use. This was quite frustrating because it halted the progress that I could make, just as I was really getting into the project and wanted to get everything working together.

When I did have all the equipment I needed and I was able to make progress it showed me how enjoyable academic research can be. Things don't always work out exactly how you want them to, but when they do work and the target of the task is reached it is a very fulfilling experience. There is a sense of achieving something useful this kind of research can give.

The internship has given me a view of the world of academic research that has definitely helped me to understand the things that I want in a job, and the things that I would want to avoid. Now that I'm about to start my final year as an undergraduate it will be very useful to have this better understanding of what I should look for in jobs. The whole time that I was there I never felt under pressure or stressed about the project; this was down to the generally relaxed attitude of my supervisor. Of course, there were targets to achieve, but he never expected me to reach these by a certain time or day. When dealing with complex tasks this approach is definitely the best to work with because it isn't easy to predict how long something should take and trying to rush to meet a deadline would most likely have ended up with the task not done properly anyway.

Overall, it has been a valuable six weeks spent applying knowledge from my degree as well as learning new things that I wouldn't have got in a teaching environment. I have enjoyed the chance to experience a different working environment and an area of research that I hadn't experienced before.