Case Study: Internship

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Which company did you undertake work experience with?

Towers Watson - they are a global consultancy, working in areas such as insurance, retirement, benefits, rewards packages and investment.

How did you go about finding the internship?

I had been looking for an internship since the start of December of my 2nd year. After a failed application to another company, I noticed that Towers Watson had their own small careers event. I dedicated a bit of time to go there and talk to people who work in the company. I spoke mainly with someone working in the software department, but there were people from investment and retirement branches of the business as well. I also spoke to an employee who I later found out was the global organisations manager and was at my first interview. There were no e-mail signups at the event, but I was pointed to their website, where I could find the job description and apply. The website was easy enough. It was an application form format, but you were able to attach your CV and covering letter as well.

What was the timescale for your application? What was the application and interview process like?

The first deadline for the application was 14th of February, which was later extended to allow more applications. You receive an automated e-mail that your application has been submitted, but I had to wait a few extra weeks for a further response. I received an invitation for my first interview to be held on 6th of March in Holborn offices. They were flexible with the hours, offer to subsidise travel costs and provided me with what would be covered in the interview. I was told to research a bit about the company, what they do, and specifically about software line of business. I was also asked to prepare for questions on my "experiences, strengths and motivations around a career in Software Engineering". I had a real weakness in this style of questions, so I sought help from a Careers Consultant at Imperial to provide me with a few points to cover.

On the 14th of March, I was informed that I was invited to an assessment day, held on 25th of March in Reigate offices. Prior to that I had a week to submit a code test sent via e-mail. I was free to implement it in any language I felt most comfortable with. I chose Java, but I heard from other applicants that they were happy with C#, C/C++ or Python.

The second interview was of purely technical nature, where I mentioned the projects I worked on during my second year and how we facilitated teamwork and software development process. They wanted to gauge both how well I would get on with other team members. My code test submission wasn't mentioned by the interviewers, but I referenced it in one of my responses. The whole interview took maybe 30 minutes. Then I

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had a meeting with a previous graduate, who had just joined the team.

Afterwards I was supposed to give a short 10 minute presentation about how the company could use cloud / distributed computing services to help their business. Due to unforeseen circumstances, only the HR adviser, who was there for my first interview attended the presentation. I received a phone call on the 27th of March that I was accepted into the internship programme. Following that I received e-mails with instructions on how to sign up to the process.

The company also subsidises interns' travelling costs during the period of the internship and the amount is dependent on how far away you live from Reigate offices. I didn't know where I was going to live for the summer, but fortunately the form did not have to be returned unto the 6th of June. My internship started on the 30th of June, along with interns for other departments. The standard internship period is 6 weeks, considerably short, however I managed to extend this period to 12 weeks in total, after a few weeks of work and a talk with my manager.

How big was your team and where did it sit in the organisation?

I was put in a software team that develops products for life insurance companies. Other teams I could have been put into were P&C insurance or investment software. Our team was of about 20 people including management and testers. The product I was working on had 10 people. All teams are sat on the same level in the offices and have plenty of community areas to talk to other colleagues. Reigate office holds the largest software team in the UK, a total of probably 80-90.

What was your role and what did it involve?

The first week was all introductory courses and team-bonding events with other interns. This was mainly due to unfortunate move of Software team from the old Epsom office to Reigate. The next 2.5 weeks I worked on my code test submission under the eye of my mentor. I had to re-implement it in C#, as the team uses that language and .NET framework quite heavily. It was a new language to me, but I got up to speed quite quickly.

I was introduced to some design principles, MVVM and UI-design that the team uses and I was asked to implement those in my application. After this I was asked to work on a new product that we are currently developing. This was actuarial software for life insurance companies, but no prior knowledge of such models is required as we have actuaries and business analysts to assist us.

I stated with testing features, which were already implemented in the product and raising bugs/problems to other developers. I felt that my work was valued, since I brought a large number of issues to attention of my colleagues. In the meantime I was also given a small user story to implement. Following this, I could then fix the raised bugs, refactor code to introduce new features more easily and write unit tests. In the process of doing this work I learned quite a lot about the reason for designing systems a certain way and how the software development process works.

I was also asked to complete a HR Corporate Social Responsibility project with interns from other departments to get us used to conference calls and long-distance team working. At the end of our internship we had to present the results of our HR project to other intern teams and the HR panel. I didn't enjoy this project as much as it was unrelated to the work that I was doing, but still taking up a significant amount of time.

What was the most valuable thing about your work experience?

I would say the most valuable thing I got out of it is a graduate job offer. I will be joining the company full-time next year, after deciding to drop my 4th year of studies. I've also expanded my technical skills gaining experience in learning C# from scratch as well as .NET framework, Microsoft SQL Server, MVVM, WPF, UI design, IoC container & Dependency injection, various design principles and patterns and a bit of ASP.NET MVC. These are not taught at Imperial but are very much essential for work in industry.

Do you have any tips for future Imperial students looking to make the most of their summer?

Start early and stick to a handful of companies. Apply well and research the companies. Show that you have a real interest in the company instead of vaguely throwing your CV at them.