Caolan Barry

Cover Letter

I am writing this letter to apply for a 6-month internship as a Software Engineer Intern at Demonware beginning in January.

Currently I am in my fourth year of an undergraduate degree in Computer Science in Trinity and I am also undertaking the integrated master’s program in which I will be doing an industrial placement beginning in January. Demonware caught my attention as I myself have played and still play games, some of which have most definitely used Demonware’s technology for matchmaking services and other multiplayer features. I spoke to your colleague’s Méabh McCarthy and Stephen O’Sullivan at the internship speed connect event who also filled me in about Demonware’s work.

I believe I would make a great addition to the Demonware team for many reasons. Firstly, I have been studying computer science for the past 3 years and have been exposed to multiple different modules that entail programming. The most notable projects I have done would be an accessibility tool for the Microsoft Holelens device which translates speech live in to subtitles and also permits translations to other languages. This was a part of my Programming Project module in 3rd year and I developed this application along with a team using the Unity Framework in conjunction with C# as the language for the scripting API. I have also developed another AR application for the Intern Business challenge at EY where I interned for the Summer as a Data Analyst. We were pitching that the data analytics department should utilise augmented reality for exploring data sets in order to optimise the data exploration stage of the data science lifecycle. I used Unity again for this project and also ARCore for android.

Secondly, I have been using Python as my preferred language for programming for the past few years and have become very proficient at using it. During my internship at EY, I completed a process automation intern project, where I used python scripting to parse Excel documents and integrate the data into a relational database (SQLite). The data was concerning skills of data analytics employees and will hopefully be used for team allocation as well as for training purposes. I then created visualisations and dashboards for this database. I also created a python module that would produce code reviews that used Pylint for static code testing for one of the software developers at EY.

Lastly, having worked on an advisory analytics proposition, I have gained excellent communication skills, having to communicate effectively the decisions I made regarding visualisations as well as articulating the problems with the integrity of the data. I also created visualisations and dashboards using Tableau visualisation software and used these for my recommendations for the report.

I would love if you would consider me for the role of software engineer intern, I believe I have all the necessary requirements for the position as well as knowledge of SQL databases, TCP and UDP protocols. Gaming and multiplayer gaming has been something that has had an undeniable influence over my interest in technology and I believe I have the passion for this industry and for this role.

Regards,  
Caolan