

Deliverable D11 Item 8-Pablo Rebollo Lobo.

The aim of this report is to document what kind of companies I would like to work for in the future, as well as describing the kind of projects in which they are currently involved, the technology they are using and what steps can I take in order to achieve my goals in the future.

Firstly, there are different fields in which I am interested, such as videogame development and machine learning.

When it comes to game development, there are different alternatives to consider. One option is working as an indie developer, this means being part of a very reduced development team or even working all alone. This option is very interesting from a creative viewpoint, because I could work on whatever ideas I would like, with little to no creative restrictions. However, this comes with the problem of a very reduced manpower, a very small budget, and the risk of the end product not being able to produce enough income to compensate for the time, effort and money invested in the development. This risk is also aggravated by the fact that is incredibly difficult for an indie development team to get people to know about them. Finding a publisher is the most reliable way to solve some of these issues, but at first, this task results extremely challenging.

Another option is joining a medium sized game company. These are commonly found on a national scope and while still having a small budget and a reduced number of workers, provides a more stable environment than working as an independent developer. However, you lose control on what you want to create and you have to work on what the company needs you to do. For me, this is way less satisfying, because not only I will not have power to decide what I want to work on, but also the end product is probably going to have a very mediocre quality level, as it is known that lots of these kind of companies end up producing very shallow games trying to ride the wave of whatever game genre is popular at the moment, especially when it comes to mobile game development. Despite this, I'm aware of the fact that this option is one that lots of people end up taking, and it can be used in order to gain experience and aim for a higher goal.

Lastly, there is the option of joining a big company, and while in this case most workers will have zero influence in the creative process of the product, the high budget of these projects means that I will have the opportunity to work in a well known product that is likely to reach a high quality level. Sadly, I know that managing to get a job in these companies is not an easy task, and it may be well nothing but a pipe dream.

I will also add that, even though that is less related to the job of a software engineer, I would love to work in the localization team of a game company. I have always been very critic towards the Spanish localization of any videogame, as I usually consider them of very low quality, and the possibility of being able to contribute to improve it, if only a little, is something that really motivates me.

When it comes down to the technology these companies usually work with, it is worth mentioning the usage of game development engines, such as GameMaker, Unity, Unreal Engine or CryEngine, to name some of the most well-known engines. When it comes to the programming languages used, C++ and C# are the most common ones.

When it comes to machine learning, one must be able to process a large amount of data and prepare it so that it can be further analyzed later on. While I don't know how companies that

work within this field, I am aware of the usage of some frameworks such as Tensorflow or Caffe2 and some python libraries like Keras or Theano.

Another aspect that should be discussed when thinking of my future job opportunities is whether or not I want to work abroad or not. While I would be happy with finding a job here in Spain, I'm also well aware that there are lots of job opportunities outside Spain, especially when it comes to IT jobs. Also, as it was mentioned before, one of my future aspirations would be working on a big game company, which is something difficult to achieve if I'm not ready to work abroad. That is why I would take any interesting job opportunity in another country if the chance arises, even though it would be more comfortable for me to stay here in Spain.

I have already taken some steps towards my future aspirations. I'm familiar with the Unity engine and I have already developed some very simple projects in order to learn the ropes, even if it is at a very basic level. While doing this, I also learned the basic of C#. Furthermore, when it comes to machine learning, I took some online courses and I'm familiar with the Keras and Theano libraries. Moreover, last year I managed to get a Cambridge C2 certificate in English Languages, which I hope helps me when trying to get a job in another country.

There are also more things I would like to do in the future to complement the formation I'm receiving, such as learning how to use a 3D model creation software, trying to develop more complex demo games in Unity or even trying out other game engine. I also need to deepen my knowledge related to machine learning, which probably involves taking more online courses.

Finally, I would like to add that I also have some interest in cyber security, but I am not very knowledgeable about job prospects in that field. Perhaps, another thing I should try to do in the future is to broaden my horizons and learn more about it so it can be a valid option for me in the future.