Dear Overwatch Team

I am a 3rd year student studying Computer Science at the University of Sheffield and also an experienced player at Overwatch. I enjoy the game very much and I always want to get involved in your team. I have plenty knowledge of Overwatch game including its every update and its culture as I often watch the videos about the game tournament and some fancy YouTuber player trying to break the game.

As I mentioned in my CV, I am pretty good at algorithm. I got 2nd prize in a coding competition hosted by ManAHL. The task was to write an algorithm to play the HiveMinder. The rules of the game and competition can be found in this page: <https://www.ahl.com/coderprize>. In this competition I applied the Best-First algorithm in my program with some prediction variables to calculate the score for each move. It was similar to A\* algorithm, but it runs faster with slightly sacrifice of accuracy. I could have applied some machine learning method to those variables in my algorithm. However, this process could be very slow and my previous laptop had really low processor speed of 1.5GHz, which can take ages when using machine learning to train this model. In addition, it was only 2 hours in the final competition. Therefore, I decided to manually change these variables according to their performance. (I learned faster than machine!) It is worth mentioning that I was purely working on my own with no help from my supervisor or any lecturer or any of my friends. In other words, I was able to think independently in this competition.

Therefore, I prefer to working in the field of writing algorithms of the AI players in Overwatch. Please forgive me to point out that the current AI in the game is not so strong, even in the hard mode. Players in community are often taunting the AI by saying something like ‘Can I have 1v6 AI hard mode in the game?’. My opinion for current agents in the game is that apart from their good aiming, high reaction speed and the ability to detect sneaky enemies behind them, which are benefited from the power of computer (fast and accurate computing), their strategies are really bad (always waiting for their team). Please do not feel offended. What I would like to do is to program them to beat human player in the case that they will only receive the input from the screen of pixels same as human would experience and they will have lower control speed in order to cut off their advantages and be fair. I am aware of that this could be a bit challenging. However, I am confident about it since I am currently working on a research project of programming AI using deep reinforcement algorithm in Starcraft2 and it is having a good shape.

I also participated in 30 hrs Gamejam, whose task was to create a game with given theme in 30 hours. In this activity, I had a good practice with my time management skill and game designing skill since creating a game is more than just programming. Besides I was working alone while other people had their teams. However, I was able to create a puzzle board game which I named it ‘Yeti likes cookies’, and I created 5 maps for it, (I only slept for 2 hours in this activity).

Alternatively, I can also work on the graphic programming. In last summer, I went through Direct11 Tutorial on this page: <http://www.rastertek.com/tutdx11.html>. Now, I am also taking 3D Graphic programming course in this semester. And I have good understanding about how it works.

Other roles of Software development are also fine for me. I had some experience about developing software. Last year, I was working on a software development in a team, we had a client who wanted to have a liquid democracy system. To design such system was hard, but we were so exited in this project, we had client meeting and team meeting regularly. We collected requirements from our client, discussed our plan and the ways to achieve each step and did some pair programming. Finally, we are able to produce a system that satisfy our client.

I know Blizzard Entertainment pursues exquisite in its games, and so do I. My personality always tells me not to stop when my program is finished, but try my best to optimize the code. I really appreciate this spirit of Blizzard Entertainment, and I will be **very excited** if I can work in your team. Therefore, I feel I can make large contribution in this internship.

Please consider my application and I look forward to hearing from you.

Sincerely

Junjin Chen