

# Personal reflection (Ivan Qin)

wn18676@bristol.ac.uk

- **Account of your personal contribution to the project.**

1. Deep Learning and CNN knowledge research.
2. Apply a CNN classifier with FashionMNIST dataset.
3. Apply a CNN classifier with DeepFashion dataset.
4. Create a quick label tool, and manually labelling.
5. Write the report of Data preparation and Data exploration.
6. Triplet loss selection.
7. Assist visualization with PCA in tensor board.
8. Data training.
9. Final grammatical statement check, picture typesetting.

- **Discussion of the overall strengths and weaknesses of the project.**

Generally speaking, this project is a commercial project that is very suitable for computer vision undergraduate student to learn. In addition, it is also very suitable for students who are about to graduate and will join the company. Our team completed the data processing and analysis, trained the model through deep learning. We finally compared many triplet method, found the semi-triplet is the best.

Unfortunately for this project, if there is more time and a larger data set (Now only 1500), our model may run better. In addition, since this project contains a lot of deep learning content, it would be better if we had more time to take lecture about deep learning.

- **Reflection on how the project related to the ideas taught on the unit.**

In the previous week study, there are many knowledges that have played a very important role, such as the knowledge points in Data Exploration and data visualization such as histogram, tensor board, PCA, etc.

- **Discussion of your achievements and what the project experience taught you.**

- a) **Teamwork**

This is my first time doing a project with 5-person in different major. Our team uses GitHub (code sharing), Teams (weekly meeting), Trello (task management), Google docs (brainstorming), etc. to collaborate and work online during this Covid time. Every week we determine the content of the work in the group discussion. Sometimes divide into small teams to complete sub-tasks. Since we come from different major, our views are often different, but we all discuss with each other and decide the best point of view. In addition to my team members, I am also very grateful to the team supervisor, Dan Whettam, who often give practical advice when our team encounters problems.

- b) **Further supplement my professional knowledge**

At the same time, my understanding of neural networks and deep learning has also gone a step further. I believe this project will help me play an important role in my next-year graduate studies and future work.