



Company / Organisation Name:	Walgreens Boots Alliance
Team / Department:	Data Science and Engineering
Address:	Boots Support Office, D90, Thane Road, Nottingham NG90 1BS

Provisional title for project:

Recommender Systems for Personalized Customer Experience

Short description of the problem that would be addressed by the project:

Have you ever asked yourself how websites like Amazon, YouTube or Netflix know exactly what you might want to buy or watch next? This project will teach you various recommendation algorithms which can be used to create a personalized customer experience by recommending only products relevant to the user. This in turn has a big impact on the company's revenue as users are more likely to buy products they prefer. Not only will you learn algorithms such as content-based filtering, collaborative filtering and matrix factorizations, but also how to evaluate these algorithms properly using practice-oriented scores. Finally, we will show you how to implement these algorithms at scale using real world anonymized data collected at Boots.

Short description of the data sources that would be used in the project, and how they would be used

For a start we will use the free MovieLens dataset containing ratings of movies given by various users. As the project progresses, we will replace the MovieLens dataset with rating and transaction data collected at Boots.

Would any work by the student need to be carried out on site at the Company with the exception of supervisory meetings?

Most of the project can be done remotely with frequent video call sessions. However, access to Boots' data and computational resources might require presence in the office for a couple of days, all subject to UK government COVID-19 guidelines.

Any issues of data confidentiality and IPR that would need to be resolved

All the data used in the project is anonymized and the student will sign a non-disclosure agreement with the sponsor to ensure confidentiality of the project data.

Essential skills

Programming skills in Python as well as basic Linear Algebra are essential.

Desirable skills

Some knowledge of Machine and Deep Learning is helpful to work on the project.

Preferred degree programmes (if any)

Any programme with a primarily Data Science or Machine Learning focus.

Preferred selection method

Interviews will be carried remotely using video calls.

Support and training offered by the company

The student will be supervised by at least one mentor from the company. Frequent video calls or face to face meetings will ensure that the student receives all the support needed to successfully finish the project within the given time.

Financial assistance offered by the company

The organisation will pay the honorarium (£500).

Any other comments

For details on how to apply, please visit:

www.cdrc.ac.uk/education-and-training/masters-dissertation-scheme/