

Company Name:	Barclays Bank UK PLC
Team / Department:	ACE – Analytics Centre of Excellence
Address:	Canary Wharf, London

Provisional title for project:

Predicting the potential sales at new locations – utilising transactional datasets

Short abstract of what the project would probably entail, and the data to be used:

Using the Barclays transactional dataset – covering Debit and Credit Card spend, creation of a model to derive comparative attractiveness between new potential locations

Areas of work could include (but can be shaped with student)

- Normalise data for regional and demographic bias
- Creation of Gravity model utilising with sales prediction utilising transactional data
- Assessment of “success” criteria utilising impact of prior store openings – as model inputs
- Create web scraper for Rent per Square foot by area for attractiveness score

Data will include: Transactional data with location, demographic and customer location (home address) data

Essential and desirable skills that the student would need to have:

Essential skills (NB): Coding: e.g SQL, Python

Desirable: Scala, Pyspark, knowledge of gravity models, Geospatial analytical skills or location planning, knowledge of gravity models, knowledge of Hadoop based infrastructure, Alteryx. Tableau

Preferred degree programmes (if any): Data Science

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

Yes the student will be required to work at the Barclays London office whilst working on the project.

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

Given the sensitivity of the data and project, Barclays will monitor data usage throughout project, no data or insight will be taken outside of Barclays without prior permission, any publication or description of work will be agreed with Barclays, in addition any outputs will remain Barclays' IP

Preferred selection method

Initial telephone interview and face to face interview as next stage

Support and training offered by the company (please could you state the level of supervision you are happy to provide – e.g. one hour long meetings every two weeks at company HQ)

Student will be expected to work at the London Barclays Office whilst working on the project, and will be given ongoing in person support during this time

Financial assistance offered by the company

I agree to pay the student £500 (plus reasonable travel expenses)

Any other comments

Student will need to be based in London Barclays office when working on the project.

For details on how to apply, please visit:

<https://www.cdrc.ac.uk/retail-masters/details-for-students/>