Company Name:	Experian
Team / Department:	Marketing Analytics
Address:	Nottingham

Provisional title for project:

Automotive Buying Trends

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

Experian have direct access to DVLA data dating back to 2014 of all vehicle registrations and associated vehicle data. This data can be used to ascertain the various attributes of a population who buys certain types of vehicles, as well as the information about those vehicles. Proposed legislation will enforce the removal of certain types of vehicles from UK roads and this is likely to change trends in new sales in years leading up to this enforcement.

Recent trends have seen an increase in the availability and affordability of 'Green' cars, which utilise technology such as hybrid engines. Companies such as Tesla have also pushed the use of fully electric cars. Automotive companies are therefore looking to understand how the automotive landscape will change, in order to drive commercial strategy going forward.

The objective of the project is to analyse trends in the automotive industry towards differing types of vehicles and how this has changed over time and project forward into the future. The exact method for conducting the analysis is open, from basic regression analysis to more advanced techniques involving machine learning or time series analysis. The goal is to identify change over time, and make projections into the future with a degree of probability.

The solution can be presented as a model, or alternative visualisation methods can be used in order to demonstrate the findings.

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

Essential skills (NB):
- Analytical background; awareness of statistical techniques
- Ability to communicate technical results to non-technical stakeholders
- Awareness of time series modelling techniques

Desirable:
- Experience applying analytical methods to real life business problems
- Experience in working with large datasets
- Confidence converting a real-life problem into a pipeline of analytical tasks
- Data visualisation techniques and best practise
- Machine learning skills, e.g. Data Robot, H2O, or other packages.

Preferred degree programmes (if any):
- Any degree with significant analytical element

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

This is to be confirmed. We are hopeful that extracts of the data sets could be accessed securely enable primarily off-site working (but we should be able to accommodate the student on-site in Nottingham when required, subject to them completing our standard pre-employment checks)

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

We will need to work through what data we will be comfortable releasing off-site for the analysis itself. We may also need the student to go through some 'pre-employment checks' and will definitely require them to sign an Experian confidentiality agreement to protect both the student and Experian. We recognise that for the work to be of value to the student then it will need to be publishable/shareable in some format and, subject to Experian reviewing the content and having the right to edit/sign-off (especially regarding insuring that nothing commercially sensitive is included) then we're confident a workable

solution can be found. However, for the project to be of value to Experian, Experian must be free to commercially exploit and build on the outputs of this work, without restriction, and will own any IPR arising from this work.

Preferred selection method

Face to face interview/Skype interview preferred

Support and training offered by the company

This is likely to vary – but is likely to average an hour's face-to face meeting every 2 weeks (with potentially some additional telephone check-ins at key stages of the project)

Financial assistance offered by the company

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

Any other comments

The data used for this project is derived from a commercially sensitive source. We hope to anonymise the data sufficiently so this won't be a problem, however depending on the visualisation techniques used we may ask for some granular levels of data to be omitted.

For details on how to apply, please visit:
https://www.cdrc.ac.uk/retail-masters/details-for-students/