**Company Name:** The Very Group  
**Team / Department:** Data Science  
**Address:** Skyways House, Speke Road, Speke, Liverpool, L70 1AB

<table>
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<th>Provisional title for project:</th>
<th>Modelling cannibalization and halo effects using product categories</th>
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**Short description of the problem that would be addressed by the project:**
The aim of the project is to improve demand forecasts at product level by considering substitution and complementarity effects between products. Work will include:
- Main data processing is already done but there still might be data processing needed to create product-specific data elements.
- Exploratory data analysis
- Modelling
- Creating a presentation with key findings
- Writing reproducible code following Shop Direct best practice

**Short description of the data sources that would be used in the project, and how they would be used.**
The data will be from the company, sourced from our Teradata database

**Would any work by the student need to be carried out on site at the Company with the exception of supervisory meetings?**
Yes - at the Speke/Liverpool address provided

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

**Essential skills**
Knowledge of one of the following coding languages/systems is essential: R / Python / SAS. The project will also require experience with time series modelling. We would also expect the following: critical thinking; attention to detail; analytical thinking; project management; self-motivation to avoid the need for extensive daily management

**Desirable skills**
If the student has experience in any of the following, this would be advantageous: hierarchical time series modelling; multilevel modelling; Bayesian modelling

**Preferred degree programmes (if any)**
Data Science or similar

**Preferred selection method**
Ideally face to face interviews as they give the candidate the opportunity to get a feel of the business, but other arrangements can be made.

**Support and training offered by the company**
You will be working as part of the retail data science team supported by a senior member of the team. You will have weekly meetings with stakeholders to share progress.

**Financial assistance offered by the company**
The organisation will pay the honorarium (£500)
Travel or other expenses will be incurred and will be reimbursed as appropriate

**Any other comments**
The Retail Data Science team offers a lot of potential exposure to business stakeholders.

For details on how to apply, please visit: [https://www.cdrc.ac.uk/mds/details-for-students/](https://www.cdrc.ac.uk/mds/details-for-students/)