**Company Name:** CACI  
**Team / Department:** Marketing Solutions  
**Address:** CACI House Kensington Village Avonmore Rd Kensington W14 8TS

**Provisional title for project:** Creating Small Area Populations

**Short description of the problem that would be addressed by the project:**
In the UK we are fortunate to have population data available down to very small geographic zones like postcodes. In international markets this is often not the case: for example in countries such as Germany or China the smallest publicly available geography still captures many thousands of people. When modelling consumer demand and distribution this is too broad. We wish to develop a project that can identify a methodology for consistently and reliably modelling demographic data at high spatial granularity. We would suggest a single country to focus on such as China or Germany, to be discussed with the student.

**Short description of the data sources that would be used in the project, and how they would be used.**
We hold commercial data that provide age and consumer spend at the lowest existing level across Europe. These can be provided if necessary, but we would be especially interested to investigate how public data could be used. Example datasets could be LiDAR, Consumer Data Research Centre (CDRC) datasets, satellite imagery, national censuses - whatever the student can find. What we are looking for is a consistent approach and methodology that could be transnational.

**Would any work by the student need to be carried out on site at the Company with the exception of supervisory meetings?**
No

**Any issues of data confidentiality and IPR that would need to be resolved**
No

**Essential skills**
Problem solving, researching, modelling, segmentation, working with unwieldy unstructured datasets

**Desirable skills**
Communication, inventiveness, language skills in focus country

**Preferred degree programmes (if any)**

**Preferred selection method**
Face-to-face interview. We are based in London so easy to get to our offices.

**Support and training offered by the company**
Happy to provide supervision (one hr long meetings every two weeks as suggested), guidance and mentoring as well as company resources if required.

**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**
This is a perennial problem faced in international research so the student will be doing something truly innovative - there is no 'right' answer but it should be a very interesting challenge trying to get there!

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/)