**Company Name:** Movement Strategies  
**Team / Department:** Movement Analytics  
**Address:** Movement Strategies 31-35 Kirby Street London EC1N 8TE

**Provisional title for project:** Combining footfall from mobile network data and event listings to predict consumer behaviour patterns

**Short description of the problem that would be addressed by the project:**
Smart city applications increasingly rely upon mobile network data to understand consumer footfall. Cellular data present the opportunity to predict and segment by demographic profile. Using event bookings and mobile network (cellular) data, the aim of this project is to understand the relationship between event types and consumer behaviours within city centres. Once this relationship is understood, a methodology will be developed to predict typical behaviours and the likelihood that these might have either a positive (e.g. economic gain, increased footfall) or negative impact on the city (e.g. crime in the night-time economy).

**Short description of the data sources that would be used in the project, and how they would be used.**
Footfall and consumer profiling data will be provided from the UK’s market leading mobile network provider with coverage of Bath City Centre. These data will be supplemented with data provided by 'The List Bath' to identify event schedules. It is intended that our datasets may be supplemented with existing open data where appropriate (e.g. Consumer Data Research Centre, Ordnance Survey (GB), Police UK).

**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**
Yes

**Essential skills**
Python or R are essential.

**Desirable skills**
Experience using SQL and GIS tools is desirable.

**Preferred degree programmes (if any)**
Experience using SQL and GIS tools is desirable.

**Preferred selection method**
Face-to-face or Skype interview.

**Support and training offered by the company**
A full range of support and training is available from Movement Strategies, including a 1 hour meeting every 2 weeks and a full-time desk provided at our London offices, with immediate access to a dedicated supervisor and other staff.

**Financial assistance offered by the company**
Travel or other expenses will be incurred and will be reimbursed as appropriate

**Any other comments**
Movement Strategies has a strong track record of offering project placements to students over the past 5 years. Successful students will be supported with individual mentors who are subject matter experts, most of whom have previously taken part in the Consumer Data Research Centre (CDRC) Research Masters Dissertation Scheme themselves and have a good understanding of the process and guidance required.

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/)