Masters Dissertation Scheme Project form

Company / Organisation Name:	GHD
Team / Department:	Movement consulting, Advisory
Address:	6th Floor, 10 Fetter Lane, London EC4A 1BR, UK

Provisional title for project:

Study on and modelling of attendees' decisions on their journey to an event

Short description of the problem that would be addressed by the project:

The arrival profile of large public events depicts the frequency of arrivals to the venues hosting the events during the pre-event period. The shape and the peak of the profile have a great impact on crowd management of and operating of the venues. In order to maximising capacity and enhance visitor experience, while making the places safer and secure, it is essential to develop an understanding of the arrival profile.

The arrival profile is the result of an aggregation of individuals' decisions on when to leave home and by what means of transport to travel to the event. This project attempts to collect data through a short survey on a sample of spectators and create a discrete choice model based on random utilities to predict individuals' decisions. This model can be validated against exiting arrival profile as future work.

Short description of the data sources that would be used in the project, and how they would be used

The students need to analysis the variables (potential influencing factors on decision) of utility function and design a short questionnaire accordingly to collect data on side. The data collected will be used to create a discrete choice model to predict individuals' decisions on when to leave home and by what means of transport to travel to the event.

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

No requirement to be onsite

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

Data will be stored in a secure cloud-based platform. GHD have experience of supporting Master's Students through the CDRC process and understand the relevant ethical procedures that students may face. GHD actively encourages the publication of Master's research subject to the relevant data sharing and privacy policies.

Essential skills

Questionnaire design for data collection, Python, knowledge of statistics, random utility model

Desirable skills

Preferred degree programmes (if any)

A programme with a primarily statistical/data science focus

Preferred selection method

Either face to face or online

Support and training offered by the company

A full range of support and training is available from GHD, starting from a 1 hour meeting every 2 weeks, through to a full-time desk being provided at our London offices, with immediate access to a dedicated supervisor and other staff. This meeting will either be conducted in person or online, depending on the health restrictions in place.

Financial assistance offered by the company

The organisation will pay the honorarium (£500)

Any other comments

GHD 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 which who have previously taken part in the CDRC themselves and have a good understanding of the process and guidance required.

For details on how to apply, please visit:
www.cdrc.ac.uk/education-and-training/masters-dissertation-scheme/details-for-students