Company Name:	The Data City
Team / Department:	Data Science
Address	3rd Floor, Munro House, Duke Street, Leeds LS9 8AG

Provisional title for project:

Developing an 'interesting company score'

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

The Data City is using AI to discover the UK's new or emerging sectors and building company lists with accuracy. As each company embraces innovation or grows financially, they become more interesting to their sector. We are looking for a way to quantify how interesting each company is relative to their sector using a scoring algorithm. Having spoken to our customers, this is heavi ly requested but requires exploratory analysis. We will involve the student in liaising with clients to understand their needs to help define what makes a given company more interesting relative to other companies within their sector. We will evaluate this by speaking to our customers and demonstrating the use of the score. Our initial discussion has resulted in suggesting the interesting companies score is configurable per user account. The Data City will provide pre-defined templates, but we are very much open to ideas. Once a company crosses the threshold the user has set then the user can be notified

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

This will make use of financial datasets and has potential for creative data analysis (NLP, deep learning). We will build on a series of iterations and increase complexity as the project develops. We suggest this will be based on simply calculating Year on Year (YoY) turnover growth/decline etc then increase complexity from website text (innovation indicators, supply chain positioning etc.). This project also has the potential to utilise deep learning to predict innovative firms in the UK

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

The Data City is based in Leeds and we encourage the student to visit us (COVID-19 guidance permitting) but this is not essential. There is plenty of space in the office if the student chooses to work full time however we cannot guarantee a member of The Data City will be available to supervise the student

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

Yes

Essential skills

This will involve researching, identifying our customers' needs, creativity with data and python or C#

Desirable skills

Financial/Business analysis

Preferred degree programmes (if any)

A demonstrable specialism and background in data and data science. Qualifications or experience in data or computer science, marketing, science, engineering, maths, economics, policy, business, social science or other relevant subject

Preferred selection method

Online interview

Support and training offered by the company

A full range of support and training is available from The Data City, including a 1 hour meeting every 2 weeks and full time access to our data scientist

Financial assistance offered by the company

The organisation will pay the honorarium of £1000; travel or other expenses incurred will be reimbursed as appropriate

Any other comments

We will offer supervision from a data scientist who is former CDRC Masters Dissertation Scheme student. We encourage potential students to ask questions and make the most out of applying their data interests to a real-world problem. There is a likely to be an opportunity for additional paid work at The Data City throughout the duration of the research. The student will be paid the national living wage and we expect this will consist of 10-20 hours per week. We will record this with the student using a timesheet to ensure the work do not exceed 20 hours. This is optional and this will not have any effect on the candidate's assessment. The student will be most likely supporting The Data City in building lists which represent the emerging economies that do not fit into traditional SIC codes and helping our data analysts develop taxonomies

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