

Consumer Data Masters Dissertation Scheme

Project form



Company / Organisation Name:	Gemstone IT Services Ltd
Team / Department:	
Address:	Gemstone IT Services Ltd, West Clayton Business Centre, Berry Lane, Chorleywood, Rickmansworth, Hertfordshire, WD3 5EX

### Provisional title for project:

Advanced Analytics Framework for Small Professional Service Firms

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

## Project Aim and Scope

Gemstone IT designs and builds websites, mobile apps, e-commerce systems, and subscription services. This project will use the company's data sources to construct a predictive model for estimating future earnings, based on the existing sales pipeline. The model will also aim to use the data to establish ideal utilisation rates, and to create capacities for managing whatf scenarios. Additionally, the project will seek to determine the most effective ways in which to visualise and present the analysed data.

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

The primary data sources will include financial data from Freeagent, sales data from Hubspot, and project management data from Jira.

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

No, the work can be carried out remotely

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

We would want the student to keep our internal financial and project management data confidential, we would like the student to generate dummy data to use in any external presentation, and would be happy to help with this. We would want the outputs of this project to be our IP, and would grant a license for the student to use it for any academic purposes.

#### Essential skills

- Proficiency in data analysis and visualisation tools (ideally PowerBI)
- SQL
- Some understanding of financial metrics and project management principles
- Ability to integrate data from disparate sources

#### Desirable skills

- Experience with Freeagent and Jira
- Knowledge in predictive modelling and what-if analysis
- Azure Synapse Analytics
- API integrations

#### Preferred degree programmes (if any)

Any, but a student from a quantitative business school background might be a good fit.

#### Preferred selection method

Submission of a CV and a cover letter, followed by an informal interview

#### Support and training offered by the company

The student will receive a comprehensive overview of the company's operations, data structures, and the specific tools used. Regular mentorship and guidance will be provided throughout the project duration.

#### Financial assistance offered by the company

£500 stipend

If there are any questions about the 2024 programme, please contact Richard Arnold at <u>richard.arnold@ucl.ac.uk</u>. The completed form should also be returned to this address.