**7PAM2002 Data Science Project Module**

**Choosing a Project Form**

**Semester B 2024/2025**

This form will be used by your supervisor to agree your project topic and dataset. Complete as much of the form as possible then submit the form into ‘Assignments’ on the Project Module Canvas site.

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**Course: 1 year / 2 year sandwich / 2 year Advanced Research** *(delete as appropriate)*

**Semester intake to the course: A / B** *(delete as appropriate)*

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| --- | --- |
| SECTION A |  |
| **What is your proposed project title or topic?** | Analysing the Impact of Location, Amenities, and Host Behaviour on Airbnb Pricing and Occupancy Rates in London, England |
| **What is the Research Question for your project?** | How effectively can machine learning models recommend rental items to users based on their preferences and browsing history? |
| **Dataset website address (or organisation and person the dataset is from).** | |  | | --- | |  |   https://insideairbnb.com/get-the-data/ |
| **Where was the data originally collected? (who, when, where)** | **Who**: Users of rental platforms like Airbnb.  **When**: Data is regularly collected and updated as users interact with the platforms.   |  | | --- | |  |  |  | | --- | | **Where**: Online rental platforms | |
| **What type of data are you using? (e.g. image/ tabular/category/continuous etc)** | Tabular (structured data including user preferences, item features, and interaction history). |
| SECTION B |  |
| Can you attend all 6 supervision sessions on-campus? If not state reason. | Yes I can |
| What was the subject of your BSc degree and any other Master’s degrees you have taken? | BS in computer science |
| What are your career aims and/or the industry sector you would like to get into? | I aim to build a career in data science with a focus on machine learning and artificial intelligence, specifically in areas like recommendation systems or e-commerce. I am particularly interested in working in tech companies or platforms that leverage user data to create personalized experiences, such as in rental platforms, e-commerce, or entertainment. |
| A brief account of your programming/data science experience (including work or placement). | I have experience with programming languages such as Python, R, and SQL. I’ve worked on machine learning projects, including building recommendation systems, where I’ve applied algorithms like collaborative filtering and content-based filtering. |
| Any work experience (including non-computing related). | I have interned as a data analyst, where I helped process and analyze user behavior data to improve user engagement strategies. In this role, I gained practical experience in working with large datasets and building simple models for user behavior prediction. Outside of computing, I’ve worked in customer service, which taught me strong communication skills and how to work in fast-paced environments. |
| Do you have any hobbies, activities or interests. | In my free time, I enjoy exploring new machine learning techniques and building personal projects, especially recommendation systems. I also love playing video games and am interested in the gaming industry. |