**The Human Movement Recognition Project (HARP)**

**Introduction**: In recent years, the advancement in sensors and machine learning capabilities sparked the interest of many organisations. The applications of such IoT innovations gave rise to the possibility to analyze datasets to track human movement behaviour. This research can be used in many fields such as: medical, military and security. This report consists of data extracted from the Human Activity Recognition Project and provides a detailed Engineering report of the SDLC processes involved in collecting, analysing and processing sample datasets and a summary of relevant interesting findings on human movement behaviour and how machine learning models were used to accomplish these tasks.

**SCRUM Design and Sprint:**

In order to ensure the project was timely delivered a SCRUM and Sprint system was used. In trello a series of user stories with

Trello 🡪 User stories, sprints, backlog – Tracking the progress of the tasks

Excel 🡪 Burndown Chart – Wasn’t as expected because trello doesn’t consider any external factors

**Implementation**: Loading datasets, visualising the data, removing noise, feature extraction, preparing test and training data, using KNN model to project confusion matrix and produce accuracy, precision, recall and F1. (Support?) ….same for SVC model.

The data looks a bit off because the model may not have been trained properly

**Evaluation**: Findings

**Discussion:**

**Version Control:**

**Summary/Conclusion:**

**References:**