COMP6721 - Summer 2025

Phase I: Venue Classification Project

Instructor: Dr. Arash Azarfar

Team Contribution Letter

We confirm that all team members contributed equally to the Venue Classification Project for COMP6721 Phase I.

The goal of our project was to classify images of indoor scenes into three categories: Museum, Library, and Shopping Mall. We used both supervised and semi-supervised machine learning models:

- SVM (Support Vector Machine)
- Random Forest
- Decision Tree (semi-supervised using pseudo-labeling)

All members participated in:

- Preprocessing images using resizeImages.py
- Training supervised models with trainModels.py
- Building a semi-supervised decision tree model with semiSupervisedDT.py
- Creating visual result comparisons with produceResultsOfComparision.py
- Testing and evaluating model performance using accuracy, precision, recall, F1-score, and confusion matrices

We used a subset of the MIT Places2 dataset, resized the images to 64x64, and prepared the data for classical ML models. All coding, testing, and documentation work was shared among team members through regular collaboration.

We declare that the work was done fairly and as a team.

Submitted by:

Team members of COMP6721 Phase I - Summer 2025

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