

Introduction to Artificial Intelligence

Project 18: Anime recommender

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The goal of the project is to create a model for anime recommendation. Given a name of an anime as an input, the model should output a list of recommended animes.

The data is available on Kaggle. The student should perform extensive data analysis and preprocessing: visualize, clean, analyze and split the data. The student can apply data augmentation or find additional data, if possible.

The choice of a models is a part of a task. The architecture should be chosen carefully taking into account various factors: data, computational resources, final performance, etc.

The evaluation of the model should contain the metrics commonly used for the given problem as well as the visualization of the outputs.

All the important decisions made in the project should be properly motivated and tested experimentally. For example questions such as *Does data augmentations help?* or *Is architecture/method A better than B in this problem?* should be answered theoretically if possible and supported by experiments. An ablation study of the final solution is also very insightful (for an example take a look at Section 4.4 and Table 5).

The project will be done in three parts:

1. Examination of the data and existing solutions for the problem. Propose preprocessing of the data (if any is required), evaluation metrics for your model and three algorithms that can be used for this problem.
2. Implementation of the selected methods. Write the code for data processing, evaluation and classification algorithms specified in the previous part.
3. Comparison of the methods and tweaking the algorithms. Compare the selected algorithms and tweak them if necessary.

In case of any questions contact me via MS Teams