

Topic for Bachelor's Thesis

Title: Building an online review analysis system (project 2)

The projects "Building an online review system for movies (project 1)" and "Building an online review analysis system (project 2)" are designed to build a Movie Website, where machine learning techniques will be developed and used to analyze its content.

Project 1 and 2 can also be chosen as one project for two students/friends that work with pleasure together.

Supervisor: Nour Jnoub

Contact: nour.jnoub@wu.ac.at

Starting period: immediately

Description:

This project aims to combine different machine learning / natural language processing algorithms with building a review analyzing system where the similarity in users' opinions will be gathered and analyzed to help the system recommend movies based on the user's top interests. This project should cooperate with the student who works on project 1. Results of the project are to be demonstrated by a running demo application.

Technologies: Python, flask/Django, NLTK, Scikit-learn, Keras, pillow, HTML, CSS

Literature to start with:

Patel, K., & Patel, H.B. (2020) A state-of-the-art survey on recommendation system and prospective extensions. *Computers and Electronics in Agriculture* 178, 105779.

<https://doi.org/10.1016/j.compag.2020.105779>

Fleischman, M., & Hovy, E. (2003). Recommendations without user preferences: a natural language processing approach. *Proceedings of the 8th international conference on Intelligent user interfaces*, 242-244. <https://doi.org/10.1145/604045.604087>

Nguyen, L.V., Nguyen, T.-H. & Jung, J. (2020). Content-based collaborative filtering using word embedding: a case study on movie recommendation. *Proceedings of the International Conference on Research in Adaptive and Convergent Systems*, 96-100. <https://doi.org/10.1145/3400286.3418253>

Please read the [information on our website](#) carefully before starting your thesis!