## Code can be found here:

https://github.com/lucianistrati/Machine-Translation-Romanian-Dialects

Models can be found here: <a href="https://huggingface.co/fmi-unibuc">https://huggingface.co/fmi-unibuc</a>

## Structure of the code file inside the repository

- src/
  - Analysis.py
    - Plotting wordclouds of the words used in every dialect;
  - load\_data.py
    - Can load three types of data:
      - Transcriptions with 3 different formats (custom format of our annotations, sonix-format and vatis-tech-format);
      - Books by extracting their content from pdfs;
  - scrap dexonline.py
    - Work-in-progress should be used to scrap/crawl data from dexonline;
  - Train\_word2vec.py
    - Trains a word2vec CBOW model over all the books in every dialect;
  - o compare\_anns.py
    - Script used to compare how accurate were the Speech-To-Text transcriptions between Sonix-Ai & Vatis-Tech solutions;
  - mat.py
    - Script used to obtain a similarity matrix between the overlaps of each dialect:
  - Oltenizator/Tense changer.py
    - Used for changing the tense from passe-compose to passe-simple and vice-versa;
    - Can be called from the command line:
    - python tense\_changer.py -s "A aranjat camera."
    - python tense\_changer.py -s "Aranjai camera." -r
  - Translation.py
    - Has all the translation functionality from one dialect to another;
  - detect\_dialect.py
    - Inference of the dialect model
  - oltenizator
    - Conjugari.json
      - Json containing conjugations of all the verbs in Romanian
    - Verbe.json
      - Json containing all the verbs in Romanian
    - Tense\_changer.py
      - Script used to change the tense
  - o tests
    - Test\_tense\_changer.py
      - Unit test code file used to test the functionality of src/oltenizator/tense changer.py
  - Utils.py
    - Has several dictionaries that contains useful rules for translation as well as mapping of the videos and the books to dialect labels

- o Train\_model.py
  - Trains a model able to classify in what dialect a text is in;