HW: Word2Vec Applications

- **Goal:** figure out how word2vec works and come up with a scenario that is proper to apply word2vec

- **Task:** find/choose a certain data/problem, learn OOO embeddings by a modified word2vec, and do some evaluation

- **Dataset:** choose what you want / feed good to apply word2vec Note you cannot do the same things as original word2vec!

- **Novelty** (need to elaborate the details in your report!)
    - (1) How you cast your data/problem in the settings of word2vec? What is word, sentences, context? How to do negative sampling?
    - (2) How to modify word2vec (skip-gram or CBOW) to deal with your problem? It may be varied according your data/problem! Is your loss function changed? Why original word2vec cannot be directly appied?

- **Evaluation**
    - **Perform some downstream tasks** (i.e., prediction/classification)
    - **t-SNE Visualization** https://www.google.com/search?q=t-sne
    - Similar search and Analogy test

- Submit your code (zip) and a report (at least 10 pages)