

TEDtalkVis: Support user with visual interface to generate a TED talk

Project Description:

Our grand challenge is to generate automatically a TED talk. On this way, we need to have a user interface to ease the selection of some options during the talk generation process.

For instance we collected documents with key word search like “energy”, and get an overview of the main topics in these documents, like “renewable”, “power plant”, “heat”, “solar” and “oil”. We propose to visualize them as a map to help the user select the topic she wants to focus her talk on. We plan to use t-SNE (<https://distill.pub/2016/misread-tsne/>) as a mapping technique. We want to propose the same kind of map further in the generation process, for instance to display the images that could be used to illustrate the talk, and to weigh the elements so the talk focus more on one part than on another. We need interactive visualization for that sake with mapping, selection, drag and drop of the elements on the front-end which communicate to the Natural Language Processing modules in the back-end.

Duties/Activities:

You will implement t-SNE and other interactive visualizations using Python, javascript and d3.js. You will collaborate with experts in Natural Language Processing and Visual Analytics.

Required Skills:

Python, javascript, D3.js, web

Preferred Intern Academic Level:

BSc

Learning Opportunities:

Your will learn about Multi-Dimensional Projection techniques, Visual analytics, word2vec representations, NLP, visual analytics

Expected Team Size:

2

Mentors

Name: **Michael Aupetit**

email: maupetit@hbku.edu.qa

Name: Assan Sajjad

email: hsajjad@hbku.edu.qa