Friday Workshops

Deep Learning for Natural Language Processing

This workshop will focus on practical applications and considerations of applying deep learning to Natural language processing (NLP). We will start by drawing inspiration from more traditional NLP approaches, and show how many modern deep learning-based algorithms have deep roots in traditional techniques, while showing how deep learning has enabled new improvements. This workshop will heavily focus on student's understanding of problem templates in applied natural language processing, and about identifying application patterns.

We will have a practical focus, targeting algorithms, and problem templates which are able to be deployed and used today. We will cover the different components that go into deep learning systems, including word vector representations (word2vec, GloVe), contextual representations (ELMo, BERT), and general model components such as convolutional layers, Transformers, and others. We will also cover introductory material in applications such as classification, intent understanding, and others.

We will be using the Keras library for a practical session where we will implement select models, and thus, **some experience with both Python and Machine Learning is required. We recommend taking the Machine Learning and Deep Learning ICME workshops for a better understanding of the material included in this NLP workshop.**

Instructor to be confirmed