

## **Niko Schenk:**

### **Retrieving Implicit Information from Text**

Human readers have the ability to infer knowledge from text, even if that particular information is not explicitly stated. In this talk, I will address the phenomena of text-level implicit information and outline novel methods for its recovery. The main focus of this work is on two types of unexpressed content that arises between sentences (implicit discourse relations) and within sentences (implicit semantic roles). Traditional approaches mostly rely on rich linguistic features, e.g., sentiment or frame-based lexicons, and require manual feature engineering. As an improvement, I propose a collection of resource-lean methods, implemented in the form of statistical background knowledge or by means of neural architectures. The models produce state-of-the-art performance, e.g. in the classification of Chinese implicit discourse relations, or the resolution of locally covert verbal arguments in free texts. I argue that implicit information processing further benefits downstream applications, such as question answering or text summarization, and finally demonstrate its applicability to the higher-level task of narrative story understanding.