

Natural Language Processing for Biomedicine

Sophia Ananiadou

Department of Computer Science, School of
Engineering

Director, National Centre for Text Mining
Deputy Director, Institute for Data Science and Artificial Intelligence
The University of Manchester

Abstract

Natural Language Processing plays a key role in automated semantic metadata extraction, driving the extraction of structured information from unstructured documents in the form of named entities, and the fine-grained and often complex relations between them (events).

Increasingly, it has become important not only to extract complex relations but also to capture their contextual interpretation such as degree of confidence, or certainty in a finding.

I will describe NLP methods for the extraction of structured representations from text for downstream applications while addressing challenges of information extraction tasks.