Monica Mosca

Elective course - IFA - University of Wroclaw

**Computational Linguistics for English Studies: Language, AI, and Text Classification**

This elective course offers a clear and accessible introduction to **computational linguistics** — the field that studies how natural language can be analyzed, processed, and interpreted by machines. Aimed at students in the humanities, it explores how tools such as **BERT**and**ChatGPT** are used in **text classification** tasks, including sentiment analysis, topic detection, and content moderation.

The course begins with a **conceptual overview of Natural Language Processing (NLP),** introducing its foundations in **language theory and machine learning,** and continues with a focus on key**language technologies** such as **part-of-speech tagging,** **syntactic parsing,** **word embeddings,** and **neural networks.** It also provides a broader reflection on the role of **linguistic technologies within the Digital Humanities,** encouraging students to consider how algorithms shape the way we read, write, and communicate in digital environments. All tools and methods are presented in a guided and beginner-friendly format, with optional Python-based tutorials for those who wish to explore further. **No programming experience is required.**

Whether you're interested in language, literature, communication, or digital culture, this course offers essential knowledge and critical tools for understanding how human language and machine intelligence now interact in the utterances or speech acts of every day life.