

## **Profiling linguistic complexity:**

### **From human perception to language model interpretability**

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Linguistic complexity is a multifaceted notion, with definitions shaped by diverse frameworks such as language acquisition, typology, and computational stylometry, as well as by specific research goals. In this talk, we adopt a computational linguistics perspective and present linguistic profiling as a methodological framework for modeling complexity. We will discuss some case studies where profiling has been applied to model human perception of sentence complexity, drawing on both offline judgments and online cognitive evidence such as eye-tracking signals. Finally, we will illustrate how cognitively informed approaches grounded in reading behavior can contribute to the interpretability of large language models based on deep learning architectures, offering potential connections between human cognition and model behavior.