

## COLLOQUIUM

### *Discourse-Guided and Multi-faceted Event Recognition from Text*

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**Abstract:** Events are one important type of information throughout the text. Accurately extracting significant events from large volumes of text informs the government, companies and the public regarding possible changing circumstances caused or implied by events.

Extracting event information completely and accurately is challenging mainly due to the high complexity of discourse phenomena. In this talk, I will present two discourse-guided event extraction architectures that explore evidence and clues from wider discourse to seek out or validate pieces of event descriptions. TIER is a multilayered event extraction architecture that performs text analysis at multiple granularities to progressively "zoom in" on relevant event information. LINKER is a more principled discourse-guided approach that models textual cohesion properties in a single structured sentence classifier.

Finding documents that describe a specific type of event is also challenging because of the wide variety and ambiguity of event expressions. I will focus on the recent multi-faceted event recognition approach that uses event defining characteristics (facets), in addition to event expressions, to effectively resolve the complexity of event descriptions. I will present a novel bootstrapping algorithm that can automatically learn both event expressions and facets from unannotated texts, which will enable fast configurations of domain-specific event detection systems.

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