Objectives of KIEV
- Knowledge and Information Extraction with Verification
- Large scale (ClueWeb dataset, with 50M documents)
- A sophisticated verification process to improve accuracy
- Linking of extracted entities to LOD
- Three use cases: discovery of the type of relationship, entity list search and example discovery

Overview of KIEV
- Based on SPIDER\textsuperscript{1}, which extracts relationships in a large scale context
- Extended with a verification step based on machine learning techniques and interlinking\textsuperscript{2}
- Three main processes:
  - Discover examples generates many examples by combining Named Entity Recognition, Part of Speech tagging and Pattern Recognition
  - Classification verifies the type of relationship based on a machine learning classifier
  - Linking checks extracted entities by linking them to LOD (DBpedia)

Demo 1: Discovering Examples
An example for use case 1
Workflow for Discovering Examples

Demo 2: Entity List Search
An example for use case 2
Entity List Search: the user provides an entity and selects a type of relationship. KIEV outputs the possible values for the second entity, which have been verified by linking to a LOD knowledge base.

Demo 3: Discovering the Type of Relation
An example for use case 3
Discovering the Type of Relation: the labels “bored of the rings” and “lord of the rings” are provided by the user. The type(s) of relationship are then displayed according to a support score.

References: