

# Neuro-Symbolic Representations for IR

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## Part 1: Symbolic AI representations and tasks

- (Sub)symbolic AI, and representations
- Purpose of this tutorial
- Question Answering on Knowledge Graphs

## Part 2: Text-to-symbols and Ranking

- Neural Text and Graph Representations
- Text-Symbol Alignment and Semantic Annotations
- Entity Representations and Entity Ranking

## Part 3: Neuro-symbolic representations for Reasoning

- Reasoning about Relevance
- Neuro Pseudo-Relevance Feedback with Explainability

## Part 4: Applications for Neuro-symbolic approaches

- Use Case in Knowledge Discovery
- Panel & Discussion