

Knowledge Graphs

Lecture 4 – Ontologies as Key to Knowledge Representation

4.0 Lecture Overview

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Lecture 4: Ontologies as Key to Knowledge Representation

4.1 From Aristotle to AI: Exploring Ontologies in Computer Science

4.2 The Crucial Role of Mathematical Logic

Excursion 5: Essential Logics in a Nutshell

Excursion 6: Description Logics

4.3 The Web Ontology Language OWL

4.4 From simple to complex: Scaling up with OWL

4.5 Unlocking the Potential of OWL

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Additional Hands-On:

4.1 Introduction to Protégé Web and Desktop

4.2 Reasoning with Protégé



From Aristotle to AI: Exploring Ontologies in Computer Science

Next Lecture...

Picture References:

- [1] “A dystopian city street scene clearly exhibiting the consequences of both unchecked population growth on society and the hoarding of resources by a wealthy minority in the style of a 1960s pulp cover.”, created via ArtBot, Deliberate, 2023, [CC-BY-4.0], <https://tinybots.net/artbot>
- [2] Raphael (1511), The School of Athens, [Public Domain], via WikiCommons, https://en.wikipedia.org/wiki/File:%22The_School_of_Athens%22_by_Raffaello_Sanzio_da_Urbino.jpg