SUGAR: A GRAPH DATABASE FUZZY QUERYING SYSTEM

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Fuzzy preference querying of (fuzzy) data graph
- more natural and personalized definition of queries
- differentiation between hard and soft conditions
- gradual nature of the preferences and their satisfaction
- satisfaction-based ranking of the retrieved items
- lessens the risk of getting empty answers

ISSUES

FUDGE LANGUAGE

1 DEFINEDESC short AS (3,5), DEFINEASC recent AS (2010,2014)
2 MATCH
3 (ar1:Article)--[part_of]->()-[series]->(s1),
4 (ar2:Article)--[part_of]->()-[series]->(s2),
5 (ar1)--[creator]->(au1:Author),
6 (ar2)--[creator]->(au1:Author),
7 (au1)--[(contributor+)|Length IS short]->(au2:Author),
8 WHERE s1.id=WWW AND s2.id=Pods AND ar2.year IS recent

Extension of Cypher introducing fuzzy preferences over
- the structure of the graph (line 7)
- the content of vertices (line 8)

SUGAR SOFTWARE

Based on Rabbit-hole (Java)

Demonstration Scenario

On a mix of simple but relevant queries, our goal is to show:
- the interest of introducing flexibility (see issues)
- the conciseness of the FUDGE language
- the low cost of introducing flexibility