

# Going Meta #20: A recap 😄💧



# We've built a rich catalog. Check it out 🤔

## GoingMeta

We run the live streams on the **first Tuesday of each month**. (4pm BST, 11am ET, 8am PT, 3pm CEST, 8:30pm IST) Streaming on Twitch and Youtube Live.

We will use this repo to share all resources used in the sessions. Give them a try and give us your feedback!

<https://github.com/jbarrasa/goingmeta>

## 2022 sessions

#	broadcast	title	tags	recording	code
1	Feb 1	Cypher and SPARQL on the British Library catalog	Cypher SPARQL		
2	Mar 1	Semantic search. A worked example	n10s Cypher Wikidata		
3	Apr 5	Controlling the shape of your graph with SHACL	data quality SHACL n10s		
4	May 3	Ontology based reasoning 101	Ontologies Inference Cypher		
5	Jun 13	Ontology-driven Knowledge Graph construction	Ontologies Python ETL		
6	Jul 5	Ontology learning from graph data	Graph Algos ML Ontologies		
7	Aug 2	Generating natural language from your KG by annotating ontologies	NL Ontologies Cypher		
8	Sep 6	Common RDF integration patterns	Cypher JSON-LD SPARQL		
9	Oct 4	Unsupervised KG construction. Graph Observability	Orchestration Prefect Wikidata		
10	Nov 1	SPARQL based integrations	DBpedia Cypher SPARQL		
11	Dec 6	Graph data quality with graph expectations	Python Data Quality SHACL		

## 2023 sessions

#	broadcast	title	tags	recording	code
12	Jan 16	Importing RDF data into AuraDB with Python and RDFLib	Python RDFLib AuraDB		
13	Feb 9	Creating (and RDF-izing) virtual graphs over external data	SQL APOC RDF Python		
14	Mar 7	Taxonomy reconciliation	RDF SPARQL Cypher		
15	Apr 5	Building a Semantic Data App with Streamlit	Python Ontology Streamlit Protege		
16	May 2	Semantic Similarity Metrics in Taxonomies	Python NLTK Semantics Taxonomy		
17	June 1	RDF-ing between OpenAI and Neo4j	OpenAI Generative AI APOC RDF		
18	July 4	Easy Full-Graph Migrations from Triple Stores to Neo4j	Python RDF Migration Triple Store		
19	Aug 1	Ontology Versioning in Neo4j	Python Ontologies Protege		



# The (reverse engineered) journey

- Data engineering track
- Knowledge Management track
- Dev / Data integration track
- Applied Semantics

# Data Engineering track

#3

Controlling the shape of  
your graph with SHACL

How do I use SHACL with my Neo4j Graph?

Annotations are important in SHACL

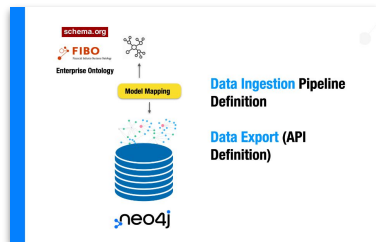
We are defining the shape of nodes labeled as Product

The property productName is optional (has cardinality 0..1) of type string and must match the regular expression...

The relationship applied by has a cardinality of 2 and must point to a node of type Supplier

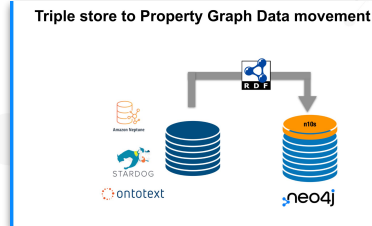
#5

Ontology-driven  
Knowledge Graph  
construction



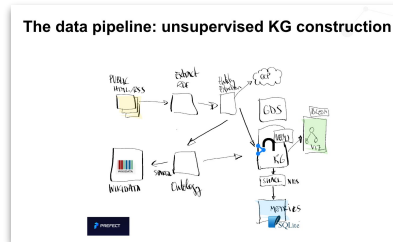
#18

Easy Full-Graph  
Migrations from Triple  
Stores to Neo4j



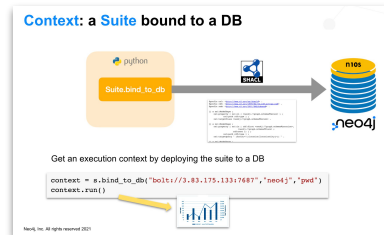
#9

Unsupervised KG  
construction. Graph  
Observability



#11

Graph data quality with  
graph expectations



# Knowledge Management track

#6

Ontology learning from  
graph data

#14

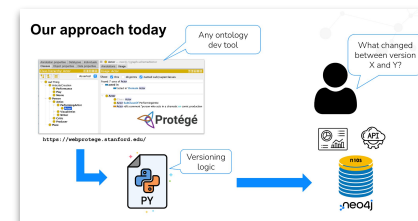
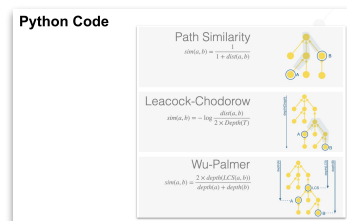
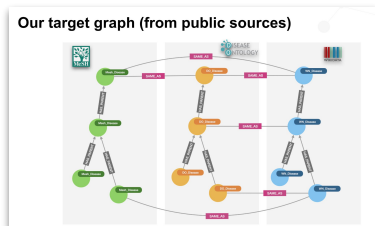
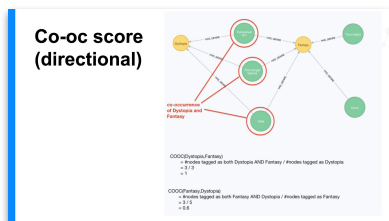
Taxonomy reconciliation

#16

Semantic Similarity  
Metrics in Taxonomies

#19

Ontology Versioning in  
Neo4j



# Dev / Integration track

#1

Cypher and SPARQL on  
the British Library catalog

#8

Common RDF integration  
patterns

#10

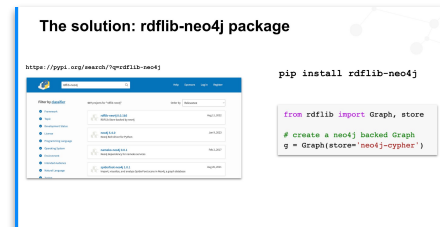
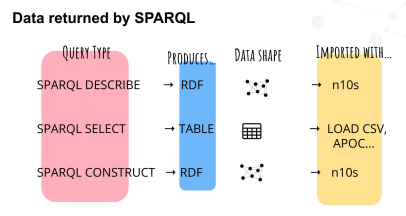
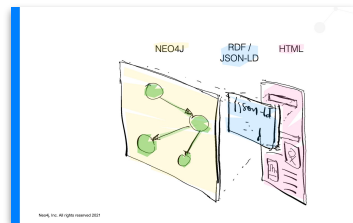
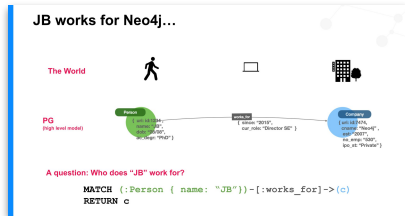
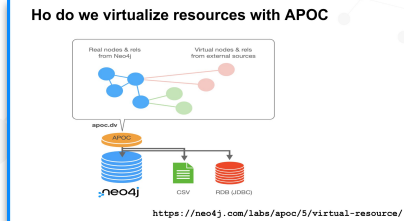
SPARQL based  
integrations

#12

Importing RDF data into  
AuraDB with Python and  
RDFLib

#13

Creating (and RDF-izing)  
virtual graphs over  
external data



# Applied Semantics

#2

Semantic search. A  
worked example

#4

Ontology based reasoning  
101

#15

Building a Semantic Data  
App with Streamlit

