TBA
Juan Sequeda, PhD
Founder
New Way to Annotate Training Data Should Enable More Sophisticated Interactions

June 01, 2018

Lambert Mathias

Alexa Skills Kit  Alexa Voice Service  Connected Devices  Alexa Programs  Docs  Alexa

Building a food knowledge graph

The classic approach of query understanding through text matching with natural language processing (NLP) works if the user intent is clear and specific. But where the intent is ambiguous, such as the scenarios outlined above, applying classic NLP approaches alone is not sufficient. Of the alternative approaches we can take, most require establishing an intelligent understanding of the entities within the food domain by building a knowledge base. Many companies spend considerable time building up knowledge bases across several domains, with Google's Knowledge Vault being one of the most well-known.
Orders
Supply Chain
Finance

SOURCE DATABASES

---------------

KNOWLEDGE GRAPH

---------------

ENTERPRISE KNOWLEDGE GRAPH

ETL to Graph Database: AWS Neptune, Neo4j, etc.
NoETL via Graph Virtualization: Capsenta Ultrawrap
DATA DRIVEN

- Quick Prototype
- Hard to manage
- Messy if it goes into production at enterprise-scale

SCHEMA DRIVEN

- Enterprise-scale
- Data Governance
- Declarative Mappings

Source

Developer

Source

Knowledge Graph Schema

Knowledge Engineer

Source

ad-hoc scripts and code

Source To Target Mapping
How to design knowledge graph schemas?


https://github.com/opencypher/openCypher/issues/307

https://protege.stanford.edu/
The Graph Industry lacks tools to design Knowledge Graphs

Similar to modeling tools for the relational database industry
First Public Announcement

DESIGN KNOWLEDGE GRAPHS, SIMPLY

Grafo is visual, collaborative, and real-time

https://gra.fo/
What’s next

• First and foremost ... Work with the community!
  • Let us know what you want: support@gra.fo
• ...
• And much more...!