Graphable Graph Data Science Care Package

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Graphable Content

YouTube Examples

Link Prediction Pipeline

(This video is a comparison of how link prediction used to have to be performed before the python client, but it is still a great demonstration of how to implement such a pipeline)

Code: https://github.com/seankrobinson/Protein-Interaction_Link-Prediction/blob/master/Link Prediction-GDS_2.0_Comparison.ipynb

Integrating Graph Machine Learning with Python | Node Classification

Code: https://github.com/seankrobinson/graph_connect_2022_demo/blob/main/Demo_Notebook.ipynb

Operationalizing Pagerank scores with Hume Visualizations

Target Protein Exploration with Hume

Blog Articles

AI/ML Consulting Methodology

Graph Database Intro

Knowledge Graph Intro

Cypher Querying Language Intro

Graph ETL Best Practices

Operationalizing Graph Data with Streamlit

Graph Data Science

Graph Data Science Overview

Graph Algorithms Overview

Shortest Path Algorithms

Closeness Centrality

Betweenness Centrality

Conductance for Community Detection

Cypher Querying Language Intro

Intro to Graph Embeddings

Overview of Convolutional Graph Neural Networks

NLP + Graph Machine Learning Pipelines

Domain Topics

Geospatial Analysis with Graphs

Fraud Detection with Graphs

Patient Journey Mapping with Graph Databases for Powerful Clinical Insights

LLMs for Drug Discovery

LLMs

Large Language Model Overview

Prompt Engineering

Chain of Thought Prompting

NER For Graph Database ETL

LLMs for Graph Data Science Pipelines

Neo4j Content

Graph Data Science Intro

https://neo4j.com/developer/graph-data-science/

Fraud Detection with Neo4j

Graph Data Science Documentation

This will contain all of the operations, concepts, and syntax for using GDS. While in the docs everything is shown as Cypher calls, the Python package replicates the syntax almost exactly. So in most cases you can copy + paste the function call into the Python Client. So don't be deterred by the lack of Python.

https://neo4j.com/docs/graph-data-science/current/

Graph Data Science Python Client

Manual

https://neo4j.com/docs/graph-data-science-client/current/

Github

https://github.com/neo4j/graph-data-science-client

Graph Algorithms Book

Note: The code in this book is pretty out of date but it is great for its descriptions of basic GDS concepts and descriptions of the essential algorithms

https://go.neo4j.com/rs/710-RRC-335/images/Neo4j_Graph_Algorithms.pdf

Graph Embeddings Blog

https://neo4j.com/blog/graph-embeddings-ai-learns-solve-problems/