

Creating a Semantic Graph from Medical Documents

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Introduction



Akash Kaul

- Former Developer Advocate Intern at TigerGraph
- Pursuing BS in computer science at WashU
- Background in data science and graph technologies



Objectives

- Create an NLP pipeline for medical texts using scispaCy
- Model entity and text relationships with TigerGraph
- Leverage graph for deeper insights
 - Similarity Search



Named Entity Recognition

- NLP technique for extracting entities (objects)
- Entities separated into categories
- Can train models for specific NER use-cases



Sample NER output from <a>spaCy documentation page



What is scispaCy?

- Python package for processing medical text and articles
 - Derived from spaCy NLP Library
- Several pretrained NER models



Workshop



Resources

- GitHub Repository
- Blog Tutorials:
 - Part 1
 - Part 2
 - Part 3
 - Part 4
- scispaCy
- CORD-19 Dataset





