Big Data Analytics for Semantic Data
BigSem Tutorial

Discussion and Conclusion

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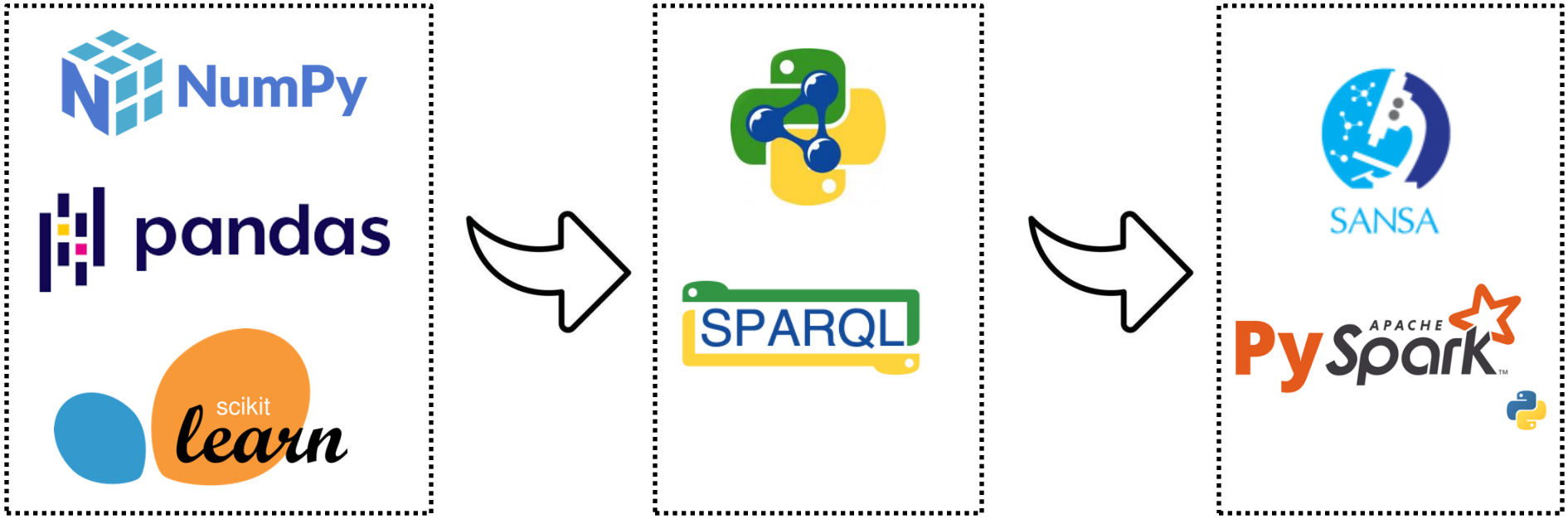
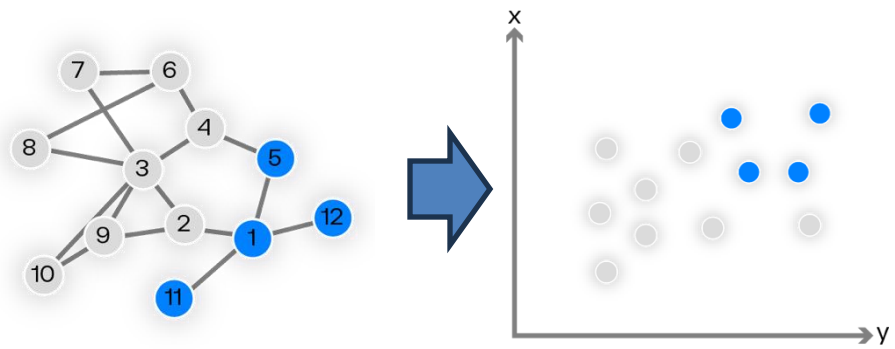
Recap

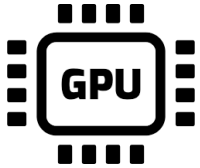
- What did we cover?
  - Libraries for analytics and ML in Python (Numpy, Pandas, Scikit Learn)
  - Libraries for semantic data access (RDFLib, SPARQLWrapper, Sparql-dataframe)
  - Semantic data analytic engines and frameworks (SANSA Stack, SparkKG-ML)



Recap

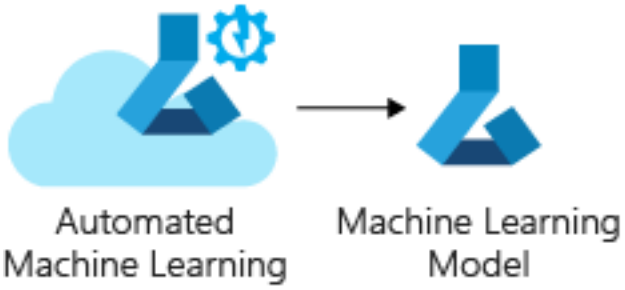
- What didn't we cover?
  - KG embeddings (supported in SparkKG-ML but not in SANSA)
  - Semantic operations in SANSA: e.g inference
  - Single/Multi-machine large-scale processing using GPUs
  - Commercial products: e.g. stardog

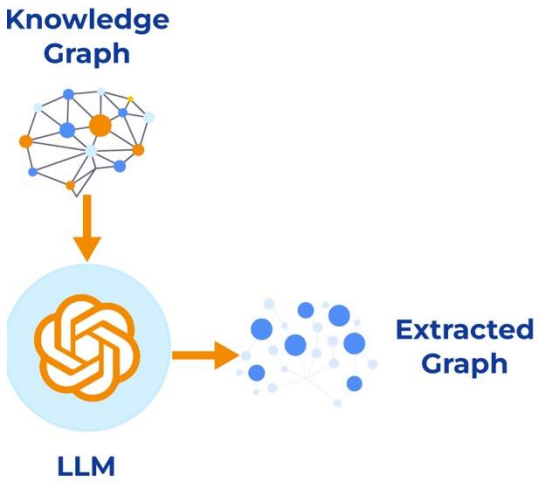




Potential Future Directions

- Addressing gaps in SANSA/SparkKG-ML
- AutoML (automating/simplifying ML pipelines end to end)
- Distributed + GPUs
- Temporal KGs
- LLMs





Conclusion

- IDIAS Lab Webpage: http://www.cs.albany.edu/~cchelmis/ideaslab.html
- IDIAS Lab Gitbhub: https://github.com/IDIASLab

- Let's make a 

!

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