



Summary & Future Directions

Automated Mining of Structured Knowledge from Text in the Era of Large Language Models

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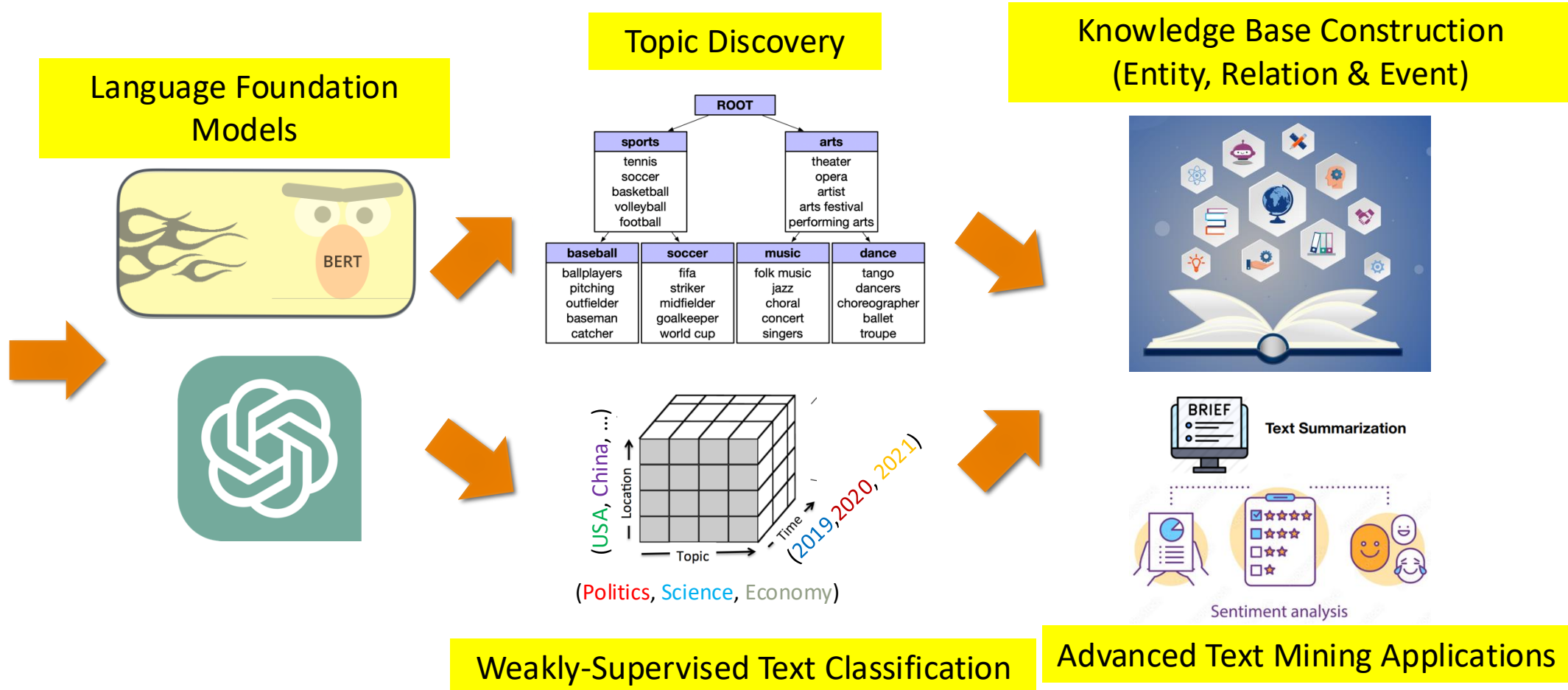
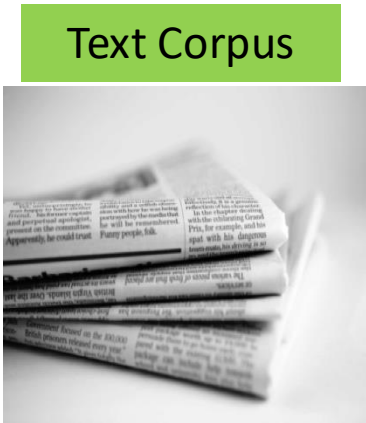
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Tutorial Website:



Our Roadmap of This Tutorial



Summary: from Unstructured Text to Knowledge

- ❑ Leverage the Power of Text Embedding and Language Models to Transform Unstructured Text into Structured Knowledge
- ❑ Mining Structures from Massive Unstructured Text (Texts → Structures)
 - ❑ Automated Text Representation Learning
 - ❑ Automated Multi-Faceted Taxonomy Construction
 - ❑ Automated Topic Mining
 - ❑ Automated Text Classification for Document Assignment
 - ❑ Automated Information Extraction and Knowledge Graph Construction
- ❑ Still a lot of work to do for mining structured knowledge with/for LLMs

Our Journey: From Big Data to Big Structures & Knowledge



Han, Kamber and Pei, Data Mining, 3rd ed. 2011

Yu, Han, Link

SYNTHESIS LECTURES ON DATA MINING AND KNOWLEDGE DISCOVERY

Jiawei Han, Lise Getoor, Wei Wang, Johannes Gehrke, Robert Grossman, Series Editors

Information Networks, 2012

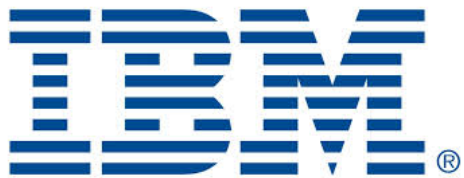
Y. Sun: SIGKDD'13 Dissertation Award

Jiawei Han and Han, Mining Latent Entity Structures, 2015

Wang: SIGKDD'15 Dissertation Award

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Thank you !

Q&A



Tutorial Website:

