

SERVING UP-TO-DATE DYNAMIC KNOWLEDGE GRAPH EMBEDDINGS

OPEN SCIENCE DAY 2024

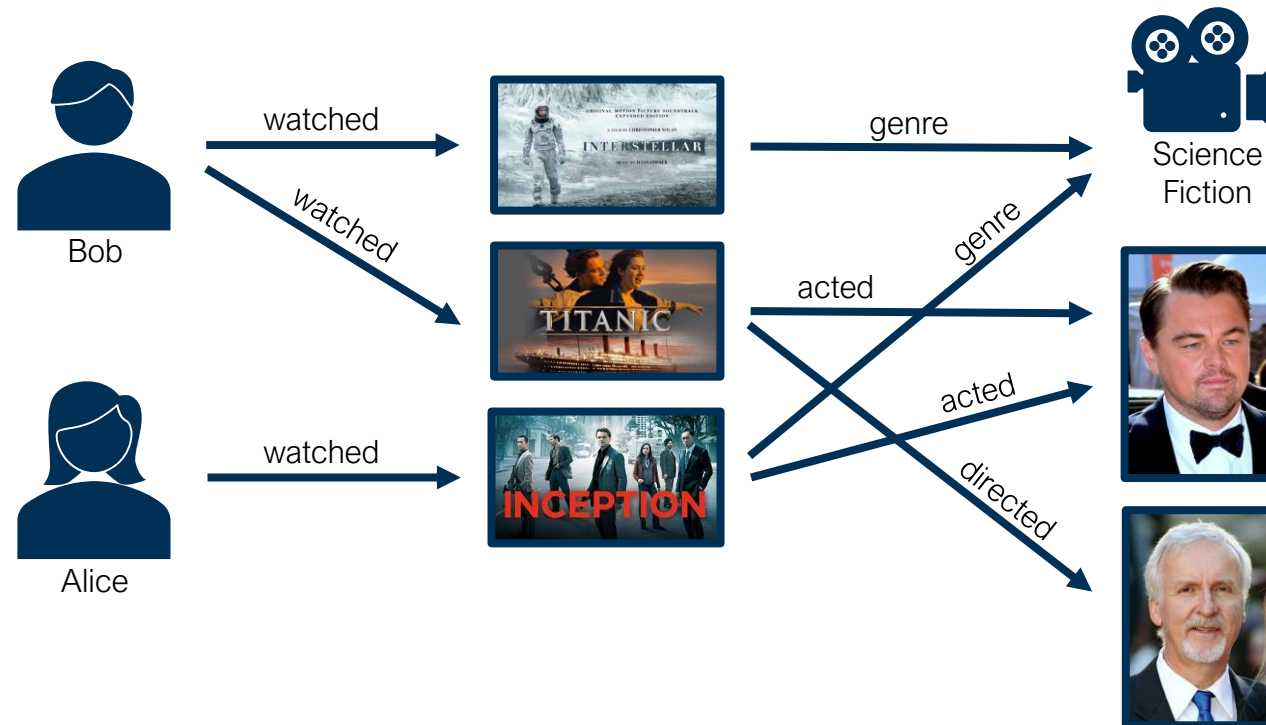


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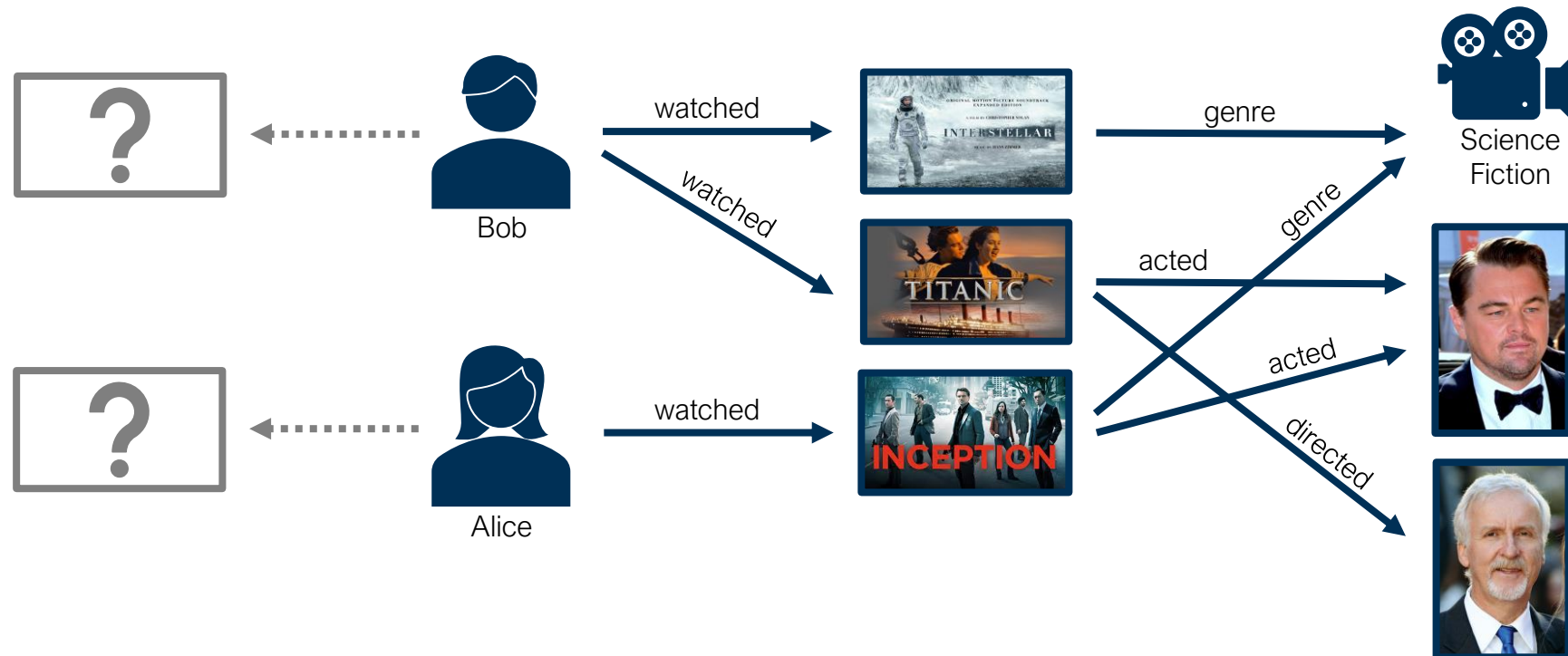
Knowledge Graphs (KGs)

KGs contain factual knowledge about real-world entities and their relations in a fully machine-readable format.



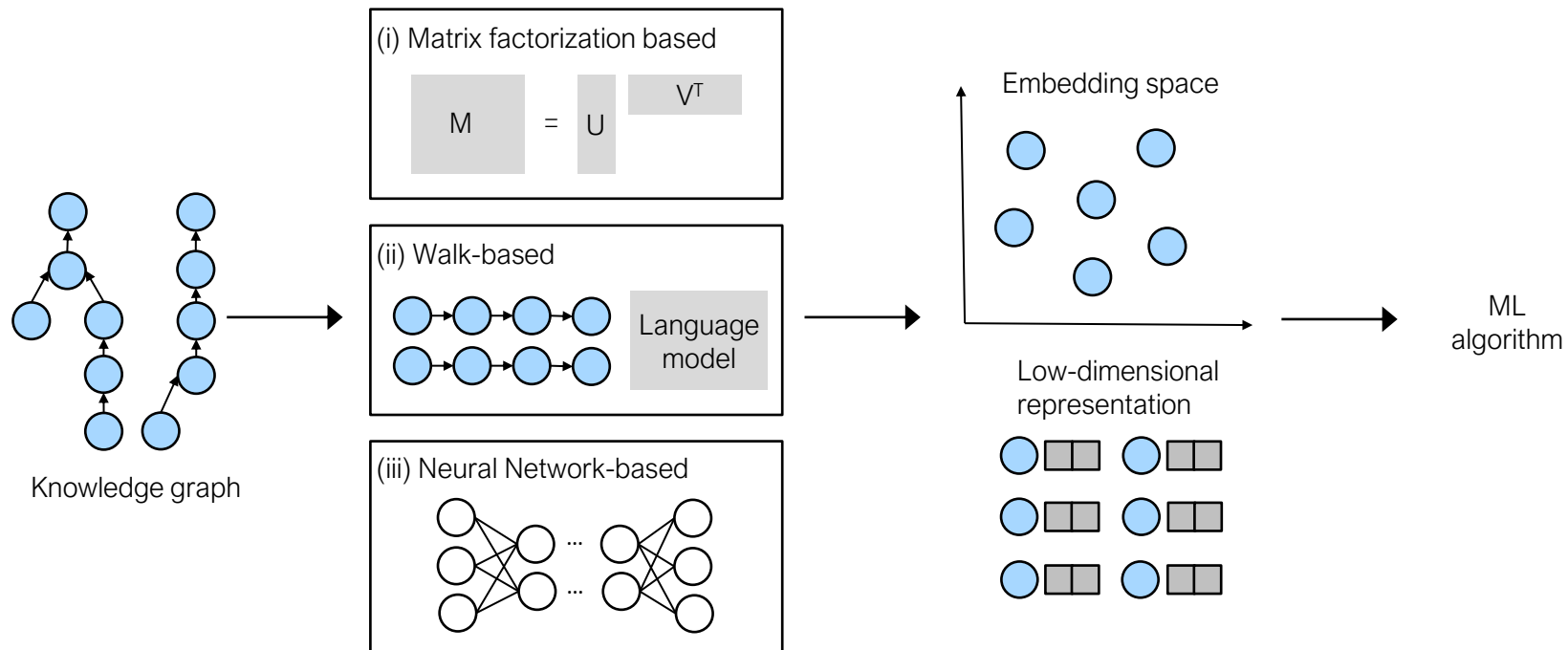
Knowledge Graph Applications

A large number of KGs have been created and build the backbone of many artificial intelligence applications.



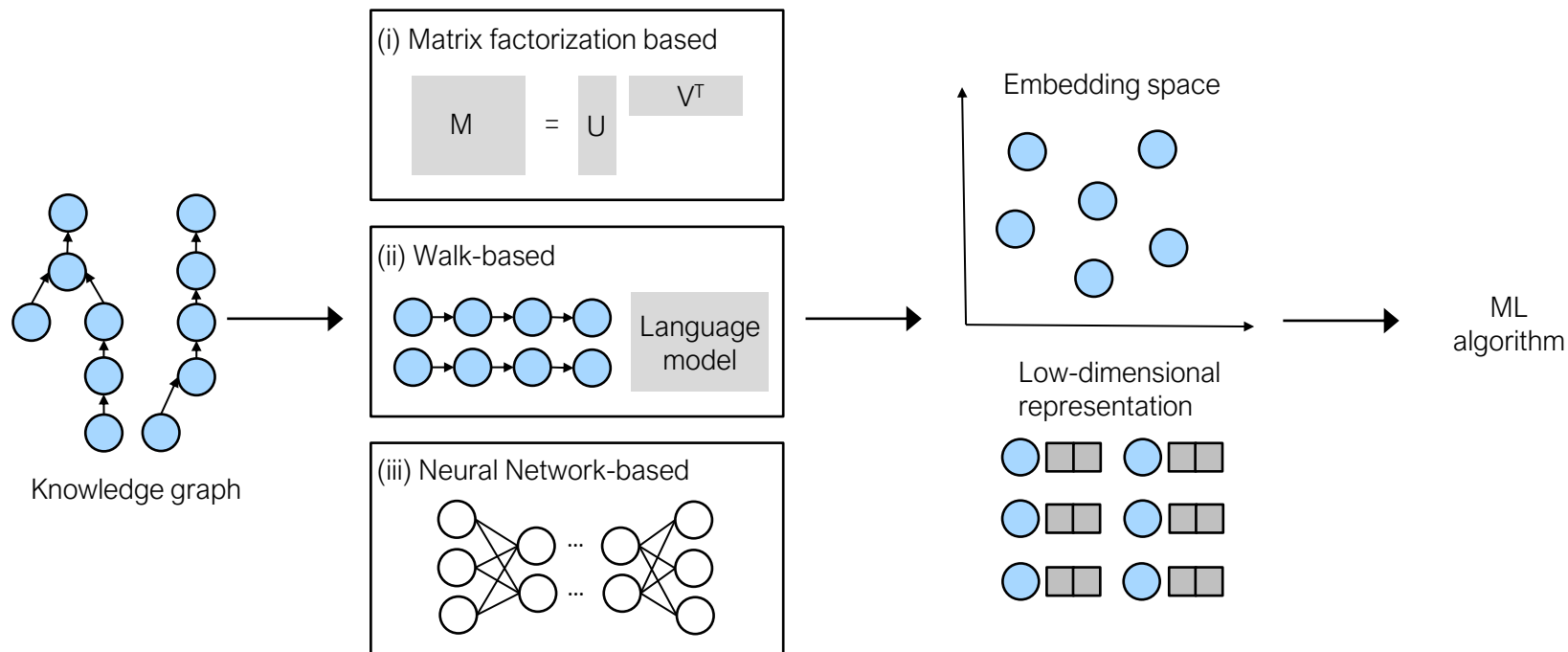
Knowledge Graph Embeddings

A current major trend in artificial intelligence with KGs is using embedding methods.



Knowledge Graph Embeddings

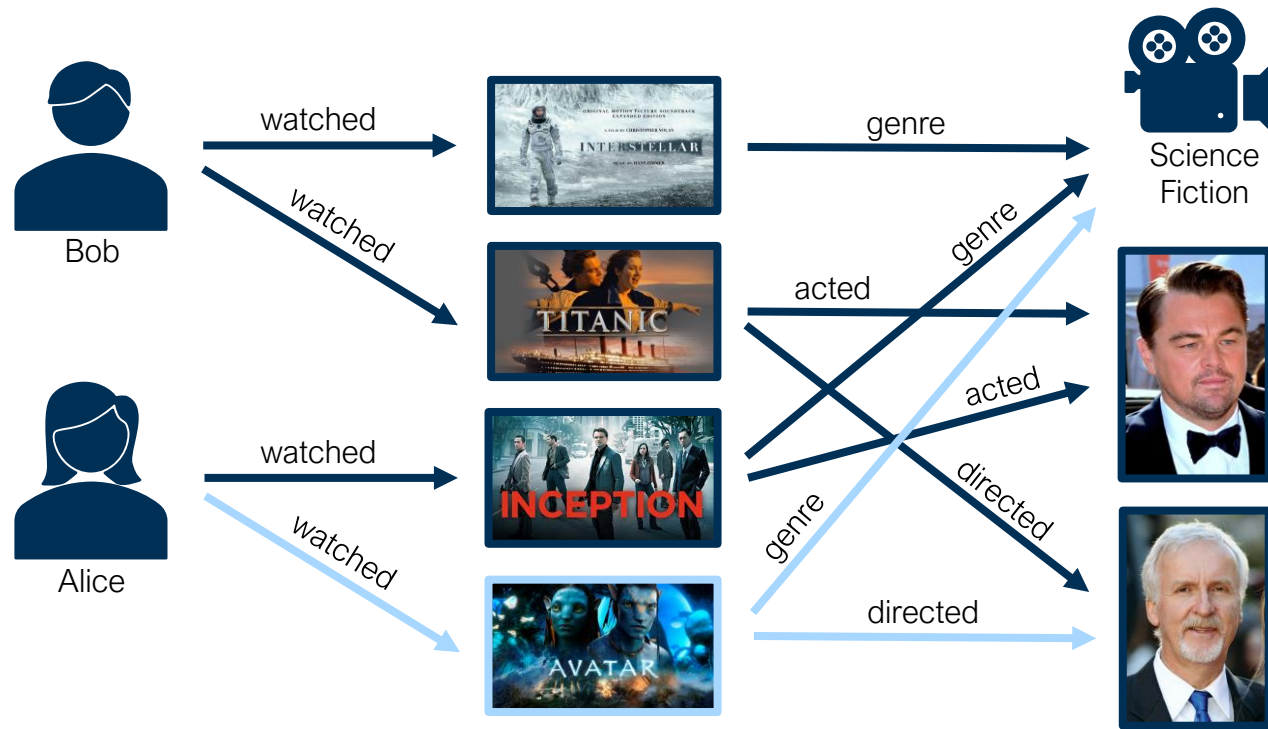
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Pre-trained embeddings trained for popular KGs are increasingly valuable.

Knowledge Evolution

KGs and ontologies can never be considered complete but must constantly adapt to the latest understanding of knowledge.



Proposal

The goal is to develop a framework capable of periodically collecting new KG versions, computing embeddings and making them publicly available for further research.

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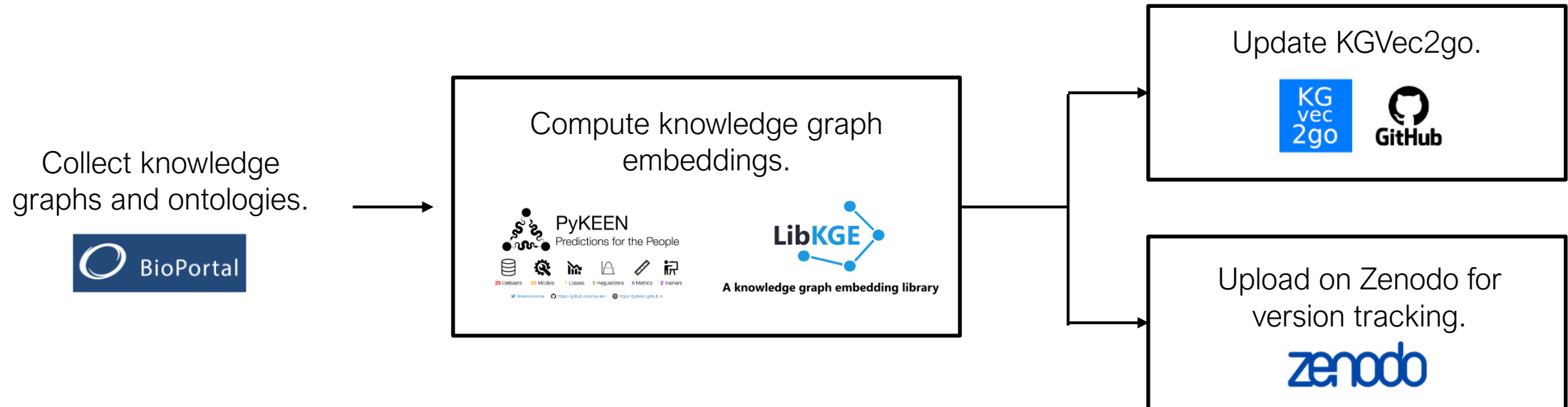
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Contributions

- Democratize researchers' access
- Empower researchers to faster experimentation
- Improve performance across different tasks over KGs
- Reduce the carbon footprint by reusing pre-trained embeddings

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Thank you for your attention.

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