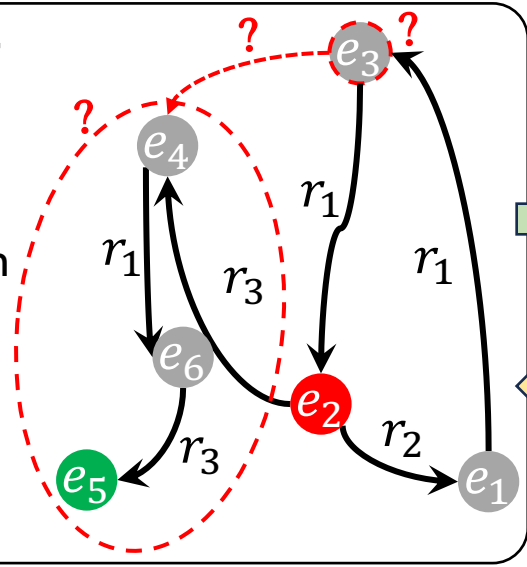
Relational graph learning

- Node, link, graph level predictions.
- How to capture the common rule from graphs?
- How to learn efficiently, adaptively and explainably?

[3] RED-GNN



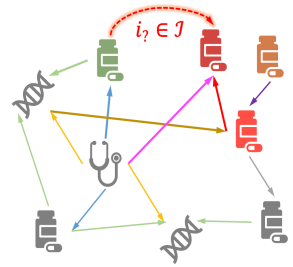
formulation

scenario

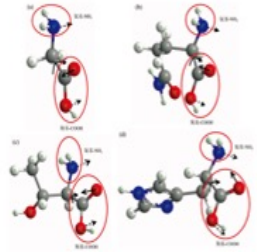
Graph for Science

[1] EmerGNN

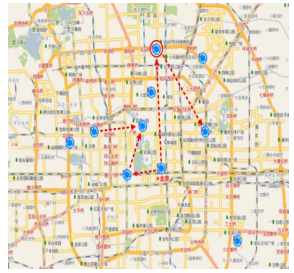
- Benefiting science applications with versatile learning on relational graphs.



Biomedical Network



Molecules



Urban Network

data

algorithm & theory

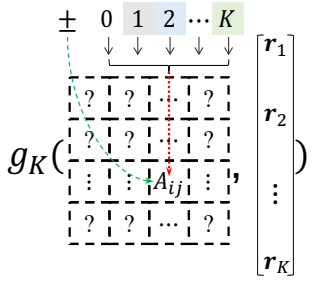
approach

application

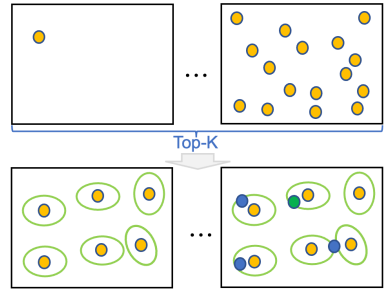
Versatile machine learning

[2] AutoBLM

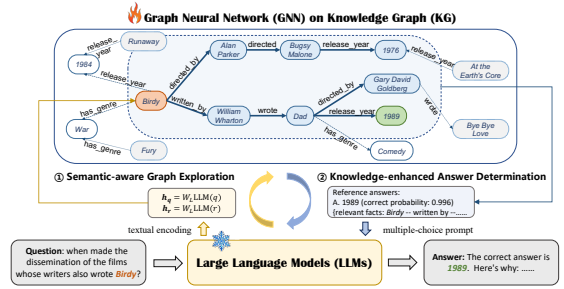
- How to design models with transferability?
- How to search and design efficiently?
- How to enable LLMs for structured data?



Auto model design



Search hyper-parameters



Pretrain-finetune LLMs