Q&A System Research

- **TensorFlow for Solving Multi-level QA**
  - TransR model (Graph embedding using triplets)
  - Eg: USA + Neighbors + Capital => Mexico City, Ottawa, …, ….
- **Techniques used to improve the model**
  - Hard Negative Sample Selection
  - Multi-step Normalization
  - Negative Sampling
- **Appealing points**
  - Obama + Spouse + Spouse => Obama!   (Cyclic relation)
  - Model is able to LEARN the type of property!
- **Future Work**
  - Improve the prediction for non-existing triplets
  - Train the model for large data.

TransR: Lin, Yankai, et al. "Learning Entity and Relation Embeddings for Knowledge Graph Completion." AAAI. 2015.