Temporal Graph Embedding

Justin Mücke

***Abstract*—**

***Index Terms*—**

I. Introduction

To start this paper out, let's first create a level playing field for all readers by laying out what exactly a Graph is, how it can change over time and what is meant when we talk about embedding.

A. Graphs

Using Graphs -¿ Thus explaing

B. Definition

$G = (V, E)$

C. Temporal Graphs

$G = G_1, G_2, \ldots, G_t$

D. Embedding

Graph -¿ Vectorspace

II. Methods

A. tbGraphEmbed

Starting paper

B. sub2vec

Is used as comparison in starting paper -¿ Look into

C. Comparison

How do Methods differ -¿ nodelevel / Graphlevel?

D. Application

Why do we use Embedding

1) Similarity: Differences Between graphs (exp - google-trends)

2) Anomaly: Where does it differ

III. Conclusion

References

[1] Moran Beladev, Lior Rokach, Gilad Katz, Ido Guy, Kira Radinsky, *tdGraphEmbed: Temporal Dynamic Graph-Level Embedding*, CIKM '20: The 29th ACM International Conference on Information and Knowledge Management, Virtual Event, Ireland, October 19-23, 2020