Project Proposal CS598 DL4H Spring 2023

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Group ID: 53
Paper ID: 28
Presentation link: #TODO

Code link: https://github.com/willtsai/dlh-sp23-team53

1 Project Proposal

NOTE: we added this section to answer the questions required for our project proposal. We will move the content from here into the appropriate sections on the draft and final reports.

1.1 Cite the original paper.

The paper we have selected for our reproducibility study is: Context-aware Health Event Prediction via Transition Functions on Dynamic Disease Graphs (Lu et al., 2022)

1.2 State the general problem the paper aims to solve. Do not use the same language as the paper.

#TODO: Will

1.3 Describe the new and specific approach taken by the paper. Discuss why it is interesting or innovative.

TODO: Sherry

1.4 Identify the specific hypotheses you plan to verify in your reproduction study.

#TODO: Will

1.5 Outline any additional ablations you plan to do and explain why they are interesting.

TODO: Sherry

1.6 Explain how you have access to the necessary data.

#TODO: Will

1.7 Discuss the computational feasibility of your proposed work.

TODO: Sherry (Will to also experiment with the code)

1.8 Specify if you will be re-using existing code and provide a link to it, or if you will implement the code yourself.

#TODO: Will

2 Introduction

TODO:

3 Scope of reproducibility

TODO:

3.1 Addressed claims from the original paper

TODO:

4 Methodology

TODO:

4.1 Model descriptions

TODO:

4.2 Data descriptions

TODO:

4.3 Hyperparameters

TODO:

4.4 Implementation

TODO:

4.5 Computational requirements

TODO:

5 Results

TODO:

5.1 Result 1

TODO:

5.2 Result 2

TODO:

5.3 Additional results not present in the original paper

TODO:

6 Discussion

TODO:

6.1 What was easy

TODO:

6.2 What was difficult

TODO:

6.3 Recommendations for reproducibility

TODO:

7 Communication with original authors

TODO:

References

Chang Lu, Tian Han, and Yue Ning. 2022. Context-aware health event prediction via transition functions on dynamic disease graphs. *Proceedings of the AAAI Conference on Artificial Intelligence*, 36(4):4567–4574.