Digital Media Laboratory

Weekly Report July 27, 2019

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Abstract

1. Reddit project
2. Image Processing final project (Create presentation and present)
3. SLT Final project (Create idea and implement)
4. SLT Presentation 5 - Interpretable Learning 2 (read)
5. DL final project (presentation)

Description

1. **Reddit project**
   We had a skype meeting with Sina and talked about the Reddit project. Also Sadegh and Erfan started to search for finding new ways of gathering data for this project. We have two main ways of extracting data: 1- Extract data from texts sent by reddit users. We need to use some NLP tools and fortunately we already found some. 2- Extract data through Network Allignment with social networks like twitter. We have started to gather some users who use same username for two different social networks. (and evidence showing that two accounts belong to same person)

2. **Image Processing final project (Create presentation and present)**
   I read the paper and created presentation for IP final project. The paper was so interesting and it was introducing another building block for neural network called Non-Local operation. [1]

3. **SLT Final project (Create idea and implement)**
   I implemented an autoencoder structure for automatically embedding papers in a latent space and then clustering them into fine number of clusters. I used k-means algorithm for clustering and spent a lot of time on generating an automated criterion for choosing k. (instead of elbow method)

4. **SLT Presentation 5 - Interpretable Learning 2 (read)**
   I started to read this [2] paper.

5. **DL final project (presentation))**
   I presented my DL final project.

Next Week

- Reddit project
- Display Advertising project
- SLT Final project (present and write report)
- SLT Presentation 5 - Interpretable Learning 2 (complete reading and present)
- New Activation Function Presentation (Weekly meeting)

References

[1] Xiaolong Wang et. al., *Non Local Neural Networks*, Arxiv

[2] Marco Tulio Ribeiro et. al., *Why Should I Trust You? Explaining the Predictions of Any Classifier*, kdd