Digital Media Laboratory

Weekly Report September 13, 2019

Mohammadreza Rezaei
h72211reza@gmail.com

Report No. 44
98/06/16- 98/06/22

Abstract

1. Reddit project (find a way to treat non-binary attributes - Run the algorithm again on new data)
2. Display Advertising project (Read some papers - Edit thesis papers table)

Description

1. **Reddit project (find a way to treat non-binary attributes - Run the algorithm again on new data)**
   I thought about dealing with non-binary attributes and found a way for categorical (more than two classes) attributes. But couldn't find a proper way for continuous attributes (Except the trivial solution which is quantizing the its values and treat it just like a categorical attribute.)

   We ran the algorithm again on the newest data on gender attribute (since the other attributes data aren't ready yet). The newest data has 1.3 GB size, 365694 users and 165917 subreddits. We ran it on my laptop for 60 epochs and it took 3h 23min 23s to run. And the results were as follows:

   - AUPR: 0.9353844074107209
   - Best threshold (on gender probability): 0.774
   - Train Accuracy: 0.9937551591716614
   - Validation Accuracy: 0.8570504527813713

   We are currently waiting for Sunday's meeting with Sina.

2. **Display Advertising project**
   I read some papers for RTB project and found some interesting topics. I also added important papers citations and their publish year to my thesis.

   Im waiting for a meeting with Pegah Co. to share my information and ask some important questions. I want to know more about the data they will provide. I also want to talk more specifically about my contribution. (I don't know what i should focus on: Another perspective on historical data? Another kind of model? A way to model visual attractiveness in predictions? Finding a way to confront Cold-Start problem?)

Next Week

- Reddit project (Meeting with Sina - RNN and network alignment - Location attribute and implementation of algorithm for categorical data - find a way to treat continuous attributes)
- Display Advertising project (Meeting with Pegah Co, and looking at their data - Asking my expected contribution)

References