

**Abstract**

1. Reddit project
2. Display Advertising project
3. SML course TA work

Description**1. Reddit project**

We changed the Age groups according to other researches. This time we face a high amount of class imbalance. Our best Bipartite model (BGNN-Beta) performs just like the linear baseline (Logistic Regression), But it can't outperform it. So we need to add more complexity and here comes the Graph ATtention (GAT). Sadeh is working on implementing GAT. I think we can manage to combine its architecture with the BGNN idea and make some improvements.

We also are working on weighting loss over each class with respect to their popularity to make the model perform better under class imbalanced circumstances.

We are still waiting to have Erfan back from DANNI project.

2. Display Advertising project

I read some papers.

3. SML course TA work

Me and Seyed Mohammadreza read some papers about Thompson Sampling and RPF model.

We wrote the draft of course project and sent them to Hamid.

We need to have data description to complete the project definition.

Next Week**• Display Advertising project**

Have a meeting with Abbas.

Confirm a dataset for the comparison.

Start applying my model on the dataset.

Start gathering competing papers implementations to compare their results.

• Reddit project

Have a meeting with Sina.

Apply class weighting to current models and get result.

Work on adding GAT to the BGNN models.

Ask DANNI group for our Erfan.

• SML course TA work

Add data description to project definition. (Ask Abbas to provide it.)

Finalize the project.

