



## Weekly Report

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### Abstract

I held a meeting with Mr. Feyzabadi, and I tried to create an idea for the personalization phase.

### Description

- I had a one-hour meeting with Mr. Feyzabadi about the future work for my project. However, mostly I was explaining my implemented parts of the project. He argued that this method is not superior to a simple frequency-based approach. He then advised me to compare my results with a method that outputs the most items clicked in training set for the given query. Discussing these issues, we could not talk about the primary purpose of the meeting much.
- I figured out an idea; inspired by [1], we can first cluster our users with respect to their history of actions. This can be accomplished by projecting them on an embedding space and grouping users close to each other. Assuming we have  $K$  group of users, we can train  $K$  embedding space consisting of queries and items, each for a group. Thus, the ranking results for each query are based on the personalized embedding space for its user group.

### Next Week

1. Examination of my new idea for shaping the road map.

### References

- [1] Jing Yao et al. Employing personal word embeddings for personalized search. *SIGIR '20: Proceedings of the 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2020.