



## Weekly Report

September 6, 2021

Ali Jandaghi Alaei  
alialaei98@gmail.com

Report No. 7  
00/06/09- 00/06/15

### Abstract

In this week, after the execution of nDCG, it approved the performance of the model to some extent.

### Description

- The nDCG evaluation successfully executed. For each query in the validation data, the model predicted the 10 most relevant categories, and the first clicked product category considered as the only correct category. After the execution, it was observed that approximately 23 percent of the samples were predicted correctly (as the first suggestion of the model), and the output of the nDCG formula turned out to be 46.01 percent. In the formula used for nDCG, if the  $i$ 'th suggestion of the model is the first clicked category of a particular query,

$$\frac{1}{\log(i+1)}$$

adds up to the cumulative nDCG variable. Finally, the nDCG is the cumulative variable divided by  $n$ , which is the total number of queries on the validation set.

### Next Week

1. Construction of a frame for managing the tale queries.
2. Deciding what to do with products that have not been learned because they do not have any clicks associated with them.

### References