# **ECE219\_Project\_3\_Recommender\_System**

# **Instructions:**

* All the codes are in ECE219\_Project\_3\_Recommender\_System.ipynb.
* Open with jupyter notebook with environment set up.
* Please run every problem one by one from beginning to end.
* Refer to ECE219\_Project\_3\_Recommender\_Systemt.pdf for the answers to the questions in the manual.
* Note that the code is written in the Google Colabatory environment, and some installment or download instructions might differ depending on the local environment.
* Iterations for KNN, NMF, and MF with bias collaborative filter parameter optimizations take 5-35 mins on the colab virtual machine.

## **Files:**

* ECE219\_Project\_3\_Recommender\_System.ipynb.
* trimmed\_data pickle files.
* Synthetic\_Movie\_Lens CSV files (retrieved from <https://drive.google.com/drive/folders/1_JF9plSjE3PAFBuSvUFRkDdftJWo1TFz?usp=sharing>.)
* Built-in google library (only available on the colab environment) was used to mount the google drive files for data reading. Change the directory name for local data reading.