

Instructions to run the code

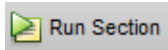
The code provided allows running the decomposition algorithm and evaluating the performance of the predictions in the held-out and post-marketing test sets used in the paper. It also allows replicating Figure 2 from the main manuscript.

Compatibility: the code was implemented in Matlab R2018a. However, we used built-in functions that had been available since previous versions:

- `perfcurve`: introduced in R2009a.
- `histogram`: introduced in R2014b.

To run the code, follow the guidelines below.

1. Open the Matlab script `DRIVER.m`
2. The code is divided into a series of sections e.g. Initialization. It is recommended to run section by section to follow the code. To run a given section, click on the section of the code you want to run and then go to the Editor panel and click on Run Section, as shown below.



(Alternatively, run the whole script but you will get all the outputs of each section sequentially).

3. Sections are dependant of each other, so make sure to run each section before the next one. Run sections in the following order:
 - a. Initialization.
 - b. Section 1. Load dataset.
 - c. Section 2. Train the model.
 - d. Section 3. Evaluation in HeldOut test set.
 - e. Section 4. Evaluation in PostMarket test set.
 - f. Section 5. Reproduce Figure 2 of the main paper.