**Structure of the files**

Dataset type A (only healthy controls taking the test twice)

Subject 1, ……..H (Honest)

Subject 1,……….D (Dishonest)

Dataset type B ( honest healthy controls+deceptive healthy controls + pathological cases)

Here Honest and dishonest are the same participants, Pathological are different participants (these are honest pathological)

Here the objective is deciding if a pathological responses is coming from a participant who is a normal who is faking or is a real pathological.

General Objective

* Reconstruct the honest response given the faked response.
* Identify (index) which item’s response underwent faking and which not (on average over all the dataset 50-55% of the responses were faked in the expected – from instructions- direction
* For the groups working on the pathological dataset the objective is deciding if a pathological responses is coming from a participant who is a normal who is faking or is a real pathological.

Methods that have been evaluated

1. Classifiers that predict the class of the response profile (Faked or Honest)
2. Multioutput regressors taking as input a faked response of subject 1 and predict the honest response of the same subject.
3. Denoiser Autoregressor. Trained on the Honest (input=Honest; Output=Honest). When a faked subjects is given as input the output approximates the real honest responses of the same subjects?
4. TF IDF with IDF calculated on Honest (if the contrast is between Honest and Faked) and with IDF calculated on Pathological (if the contrast is between Pathological and Faked).
5. IMPORTANT. All the proposed method should outperform the trivial strategy of subtracting to each subject faked response the average of the difference, across all subjects, among faked and honest response.

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