**Hard Debiasing**

a) Neutralize:

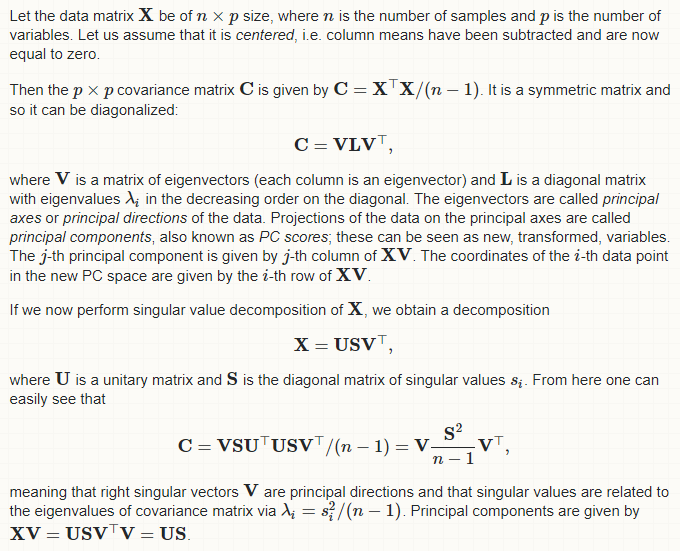


b) Equalize:

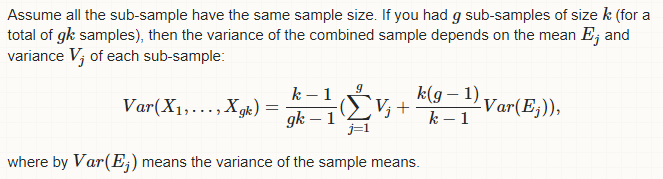


**Identify Bias Subspace**

1. first rows of



Reference: <https://bit.ly/2IJeAap>



Reference: <https://bit.ly/2s6xqB9>

Paper assumptions:

Note: Removing the scalar does not change the *eigenvectors* (i.e. the *principle-directions*). It only serves to scale up the *eigenvalues* equally, which does not change the order of the principle directions.