



Variable Transformations in TMVA

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Mentors

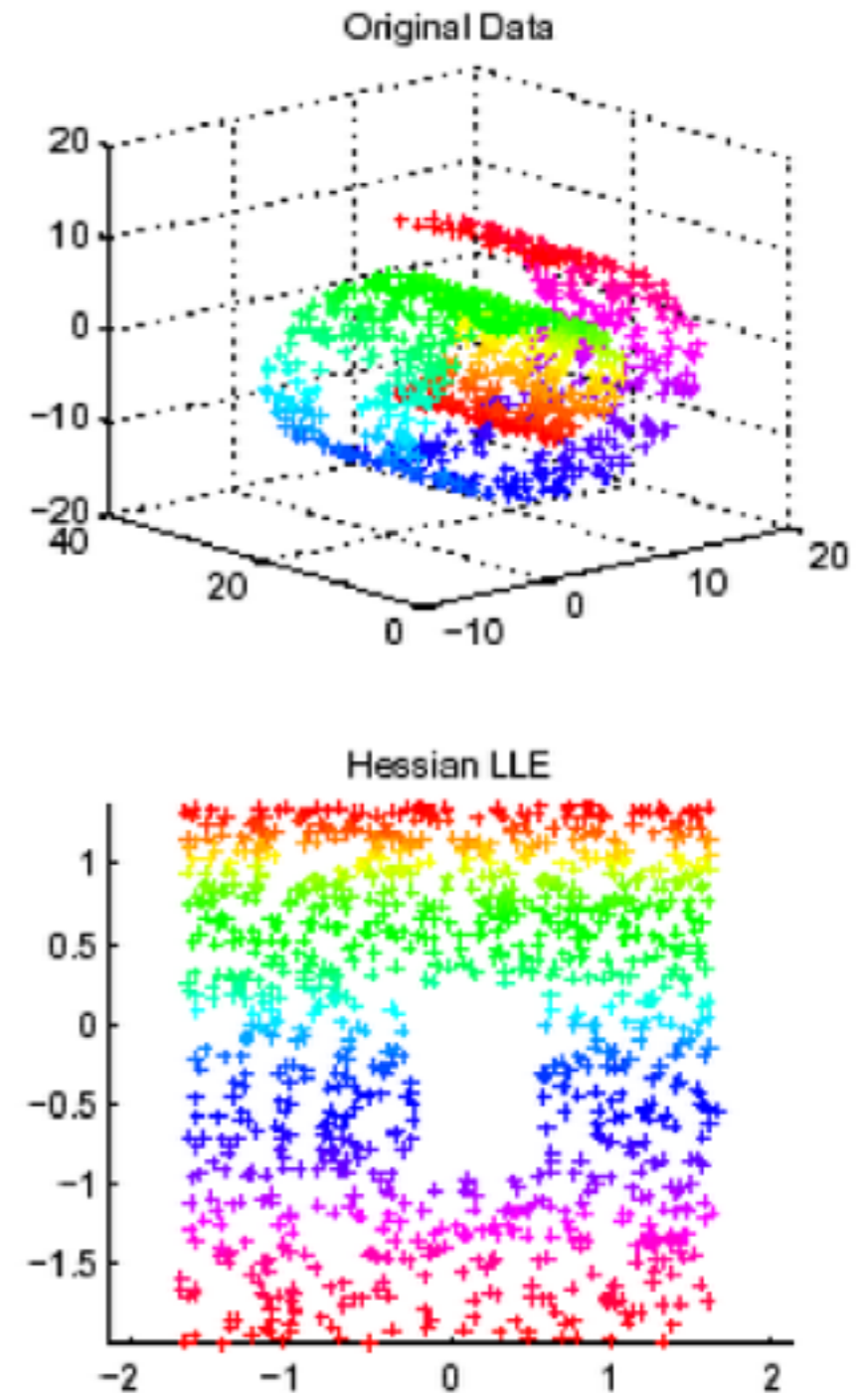
Sergei Gleyzer

Omar Zapata

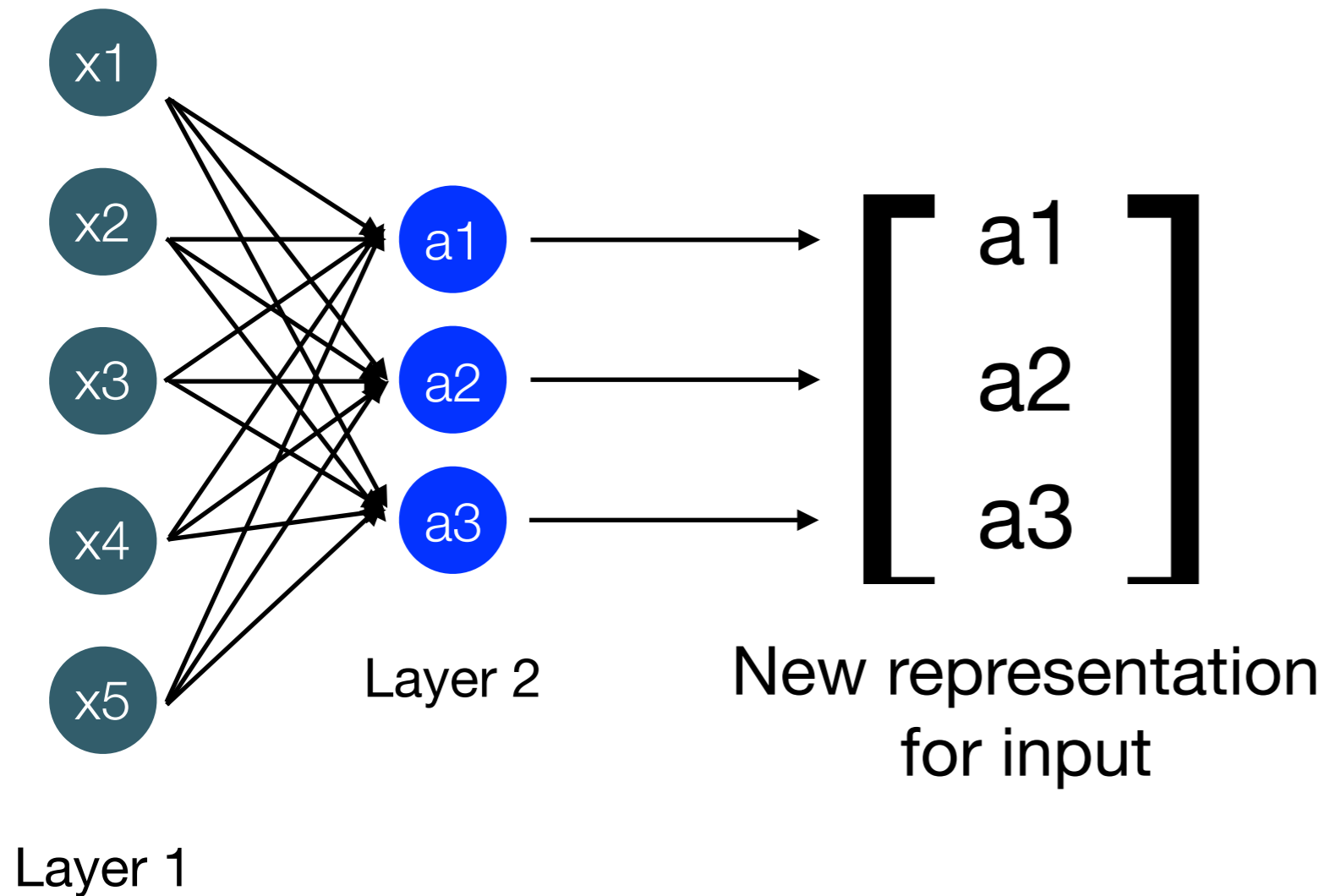
Lorenzo Moneta

Unsupervised Feature Learning

- Transformation of raw data input to a representation that can be effectively exploited in machine learning tasks
- New framework for variable transformations in TMVA with [VarTransformHandler](#) class

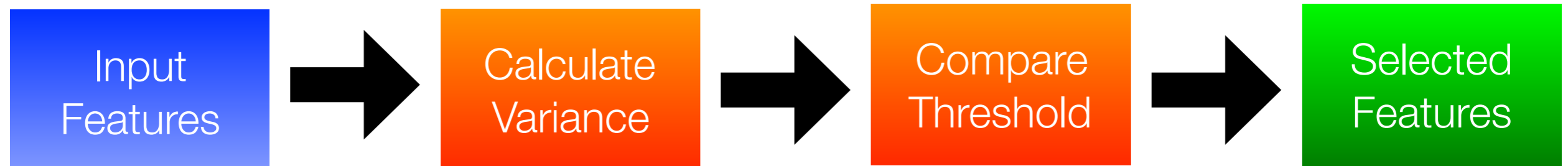


Deep Autoencoders

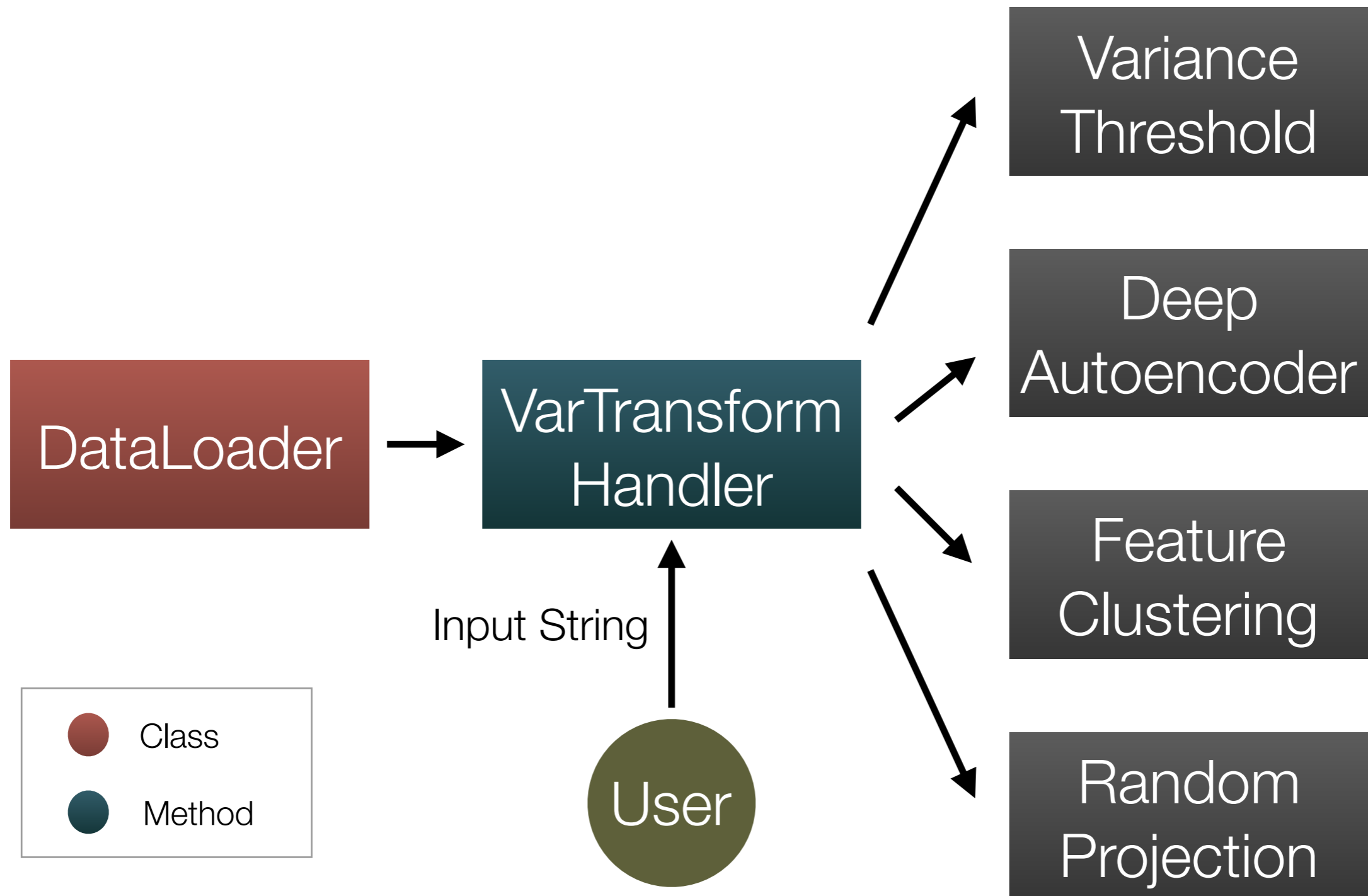


- Deep neural network is trained to output the input i.e. learn the identity functions.
- Constrain number of units in hidden layer, thus learning compressed representation.

Variance Threshold



Software Design



Thank you.