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Identifying the relevant dependencies of the neural network response on characteristics of the input space

Tuesday, 10 April 2018 16:55 (20 minutes)

The use of neural networks in physics analyses poses new challenges for the estimation of systematic uncertainties. Since the key to a proper estimation of uncertainties is the precise understanding of the algorithm, novel methods for the detailed study of the trained neural network are valuable.

This talk presents an approach to identify those characteristics of the neural network inputs that are most relevant for the response and therefore provides essential information to determine the systematic uncertainties.

Intended contribution length

20 minutes

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