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NeuroBayes Design Optimizer (NBDO)

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Finding an optimal experimental design is **computationally challenging**, especially in **high-dimensional spaces**. To tackle this, we introduce the NeuroBayes Design Optimizer (*NBDO*), which uses **neural networks** to **find optimal designs** for high-dimensional models, by reducing the dimensionality of the search space. This approach **significantly decreases the computational time** needed to find a highly efficient optimal design, as demonstrated in various numerical examples. The method offers a balance between **computational speed and efficiency**, laying the groundwork for more reliable design processes.

Type of presentation

Talk

Classification

Mainly methodology

Keywords

Design of experiments, High dimensional data, neural network algorithm

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