ABSTRACT

Optimizing the inputs for simulation models has been a topic of interest in the OR community for many years. Similarly, Monte Carlo methods for optimizing even deterministic functions have been subjects of interest in the statistics and computing communities for at least the same length of time. Recent interest in such global optimization problems arise in deep neural networks and the implications for learning and exploiting complex relationships has only intensified these interests. This talk will discuss frameworks to unify the views of these developments from different perspectives and particularly to address issues that arise in dynamic learning, optimization, and statistical inference.

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