

Applying an Automated Framework to Produce Accurate Blind Performance Predictions of Full-Scale HPC Applications

Title: [Applying an Automated Framework to Produce Accurate Blind Performance Predictions of Full-Scale HPC Applications](#)

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Abstract: This work builds on an existing performance modeling framework that has been proven effective on a variety of HPC systems. This paper will illustrate the framework's power by creating blind predictions for three systems as well as establishing sensitivity studies to advance understanding of observed and anticipated performance of both architecture and application. The predictions are termed blind because the results were completed without any knowledge of the real runtime of the applications; the real performance was then ascertained independently by a third- party. Two applications, Cobalt60 and HYCOM, were predicted to illustrate the frameworks accuracy and functionalities.

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