

A Performance Prediction Framework for Scientific Applications

Title: [A Performance Prediction Framework for Scientific Applications](#)

Authors: L.Carrington, A.Snavely, X.Gao, N.Wolter

Abstract: This work presents a performance modeling framework, developed by the Performance Modeling and Characterization (PMAc) Lab at the San Diego Supercomputer Center, that is faster than traditional cycle-accurate simulation, more sophisticated than performance estimation based on system peak-performance metrics, and is shown to be effective on the LINPACK benchmark and a synthetic version of an ocean modeling application (NLOM). The LINPACK benchmark is further used to investigate methods to reduce the time required to make accurate performance predictions with the framework. These methods are applied to the predictions of the synthetic NLOM application.

Reference: @inproceedings{carrington03frame, Author = {L.Carrington, A.Snavely, X.Gao, N.Wolter}, Booktitle = {Workshop on Performance Modeling - ICCS}, Title = {A Performance Prediction Framework for Scientific Applications}, Year = {2003}}