

Are User Runtime Estimates Inherently Inaccurate?

Title: [Are User Runtime Estimates Inherently Inaccurate?](#)

Authors: C.Lee, Y.Schartzman, J.Hardy, A.Snavely

Abstract: Computer system batch schedulers typically require information from the user upon job submission, including a runtime estimate. Inaccuracy of these runtime estimates, relative to the actual runtime of the job, has been well documented and is a perennial problem mentioned in the job scheduling literature. Typically users provide these estimates under circumstances where their job will be killed after the provided amount of time elapses. Also, users may be unaware of the potential benefits of providing accurate estimates, such as increased likelihood of backfilling. This study examines user behavior when the threat of job killing is removed, and when a tangible reward is provided for accuracy. We show that under these conditions, about half of users provide an improved estimate, but there is not a substantial improvement in the overall average accuracy.

Reference: @inproceedings{lee04user, Author = {C.Lee, Y.Schartzman, J.Hardy, A.Snavely}, Booktitle = { 10th Workshop on Job Scheduling Strategies for Parallel Processing}, Title = {Are User Runtime Estimates Inherently Inaccurate?}, Year = {2004}}