1. Record Nr. UNINA9910483514903321

Titolo	Job Scheduling Strategies for Parallel Processing : 15th International Workshop, JSSPP 2010, Atlanta, GA, USA, April 23, 2010, Revised Selected Papers / / edited by Eitan Frachtenberg, Uwe Schwiegelshohn
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	1-280-38998-2 9786613567901 3-642-16505-2
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (XI, 223 p. 99 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6253
Altri autori (Persone)	FrachtenbergEitan SchwiegelshohnUwe <1958->
Disciplina	004/.35
Soggetti	Software engineering Operating systems (Computers) Computer networks Algorithms Computer simulation Software Engineering Operating Systems Computer Communication Networks Computer Modelling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Resource Provisioning in SLA-Based Cluster Computing -- An Advance Reservation-Based Co-allocation Algorithm for Distributed Computers and Network Bandwidth on QoS-Guaranteed Grids -- A Greedy Double Auction Mechanism for Grid Resource Allocation -- Risk Aware Overbooking for Commercial Grids -- The Gain of Resource Delegation in Distributed Computing Environments -- A Moldable Online Scheduling Algorithm and Its Application to Parallel Short Sequence Mapping -- Dynamic Proportional Share Scheduling in Hadoop -- The Importance of Complete Data Sets for Job Scheduling Simulations --

Hierarchical Scheduling of DAG Structured Computations on Manycore Processors with Dynamic Thread Grouping -- Multiplexing Low and High QoS Workloads in Virtual Environments -- Proposal and Evaluation of APIs for Utilizing Inter-Core Time Aggregation Scheduler -- Using Inaccurate Estimates Accurately.

Sommario/riassunto

th Thisvolumecontainsthepaperspresentedatthe15 workshoponJobSched- ing Strategies for Parallel Processing that was held in Atlanta (GA), USA, on April 23, 2010 in conjunction with the IEEE International Parallel Processing Symposium 2010. This year 18 papers were submitted to the workshop. All submitted papers went through a complete review process, with the full version being read and evaluated by an average of four reviewers. We would like to especially thank the program committee members and additional referees for their willingness to participate in this e'ort and their excellent, detailed reviews: Henri Casanova, Peter A. Chronz, Walfredo Cirne, Julita Corbalan, Arash Deshmeh,DickEpema,DrorG.Feitelson,AllanGottlieb, RajkumarKettimuthu, Virginia Lo, Kuan Lu, Vicent Matossian, Jose E. Moreira, Bill Nitzberg, Elizeu Santos-Neto,Angela C.Sodan,MarkS. Squillante,DanTsafrir,Philipp Wieder, and Ramin Yahyapour. The papers in this volume show a proli'c growth in the areas of applicability forparallelscheduling.Togetherwiththemorecommonschedulingaspects (such asclusterandGridscheduling,workloadanalysis,metrics, qualityofservice,and task scheduling), these papers increasingly discuss more recent problems and applications, such as virtualized environments, many-core processors, DNA - quencing, and Hadoop. This volume also includes a paper that summarizes Dan Tsafrir'sworkonunderstandingthe roleofuser estimates injob schedulingev- uations. His insights, which were presented in this workshop'skeynote, are quite instructive and lead to the conclusion that accurate user estimates are indeed better fore'cientscheduling. Althoughthis conclusionmaysoundintuitive,itis actuallycontradictoryto previousstudies thatfound inaccurateestimates to - prove scheduler performance. Following his analysis, Dan also suggests practical ways to deal with estimate inaccuracy for realistic job scheduler evaluations.