

Contents

Parallel Job Scheduling: Issues and Approaches	1
Dror G. Feitelson and Larry Rudolph	
Scheduling on the Tera MTA	19
Gail Alverson, Simon Kahan, Richard Korry, Cathy McCann, and Burton Smith	
A Scalable Multi-Discipline, Multiple-Processor Scheduling Framework for IRIX	45
James M. Barton and Nawaf Bitar	
Scheduling to Reduce Memory Coherence Overhead on Coarse-Grain Multiprocessors	70
Christopher Connelly and Carla Schlatter Ellis	
Time Space Sharing Scheduling and Architectural Support	92
Atsushi Hori, Takashi Yokota, Yutaka Ishikawa, Shuichi Sakai, Hiroki Konaka, Munenori Maeda, Takashi Tomokiyo, Jörg Nolte, Hiroshi Matsuoka, Kazuaki Okamoto, and Hideo Hirono	
Demand-Based Coscheduling of Parallel Jobs on Multiprogrammed Multiprocessors	106
Patrick G. Sobalvarro and William E. Weihl	
Multiprocessor Scheduling for High-Variability Service Time Distributions	127
Eric W. Parsons and Kenneth C. Sevcik	
The Interaction between Memory Allocation and Adaptive Partitioning in Message-Passing Multicomputers	146
Sanjeev K. Setia	
Analysis of Non-Work-Conserving Processor Partitioning Policies	165
E. Rosti, E. Smirni, G. Serazzi, and L. W. Dowdy	
Loop-Level Process Control: An Effective Processor Allocation Policy for Multiprogrammed Shared-Memory Multiprocessors	182
Kelvin K. Yue and David J. Lilja	
A Microeconomic Scheduler for Parallel Computers	200
Ion Stoica, Hussein Abdel-Wahab, and Alex Pothen	
On the Benefits and Limitations of Dynamic Partitioning in Parallel Computer Systems	219
Mark S. Squillante	

Intelligent Fuzzy Control to Augment Scheduling Capabilities of Network Queuing Systems	239
Oscar Kipersztok and James C. Patterson	
Parallel Processing on Dynamic Resources with CARMi	259
Jim Pruyne and Miron Livny	
Job Scheduling Under the Portable Batch System	279
Robert L. Henderson	
The ANL/IBM SP Scheduling System	295
David A. Lifka	
Requirements of the Cornell Theory Center for Resource Management and Process Scheduling	304
Marcy E. Rosenkrantz, David J. Schneider, Roslyn Leibensperger, Melinda Shore, and John Zollweg	
Job Management Requirements for NAS Parallel Systems and Clusters ...	319
William Saphir, Leigh Ann Tanner, and Bernard Traversat	
Job Characteristics of a Production Parallel Scientific Workload on the NASA Ames iPSC/860	337
Dror G. Feitelson and Bill Nitzberg	
Author Index	361