

Reference List of H. J. Siegel Publications Related to Robustness (12/9/08)

http://www.engr.colostate.edu/~hj/Robust_Papers.pdf

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Citations include hyperlinks to the papers.

1. S. Ali, A. A. Maciejewski, H. J. Siegel, and J-K. Kim, "[On the Robustness of Resource Allocation for Parallel and Distributed Computing and Communications](#)," *The 2003 International Multiconference in Computer Science and Computer Engineering*, in the proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA '03), Vol. I, pp. 1-14, June 2003. Invited keynote presentation by H. J. Siegel.
2. S. Ali, A. A. Maciejewski, and H. J. Siegel, "[Measuring Robustness for Distributed Computing Systems](#)," *International Workshop on Frontiers of Information Technology*, Dec. 2003.
3. S. Ali, A. A. Maciejewski, H. J. Siegel, and J-K. Kim, "[Measuring the Robustness of a Resource Allocation](#)," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 15, No. 7, pp. 630-641, July 2004.
4. S. Ali, H. J. Siegel, and A. A. Maciejewski, "[The Robustness of a Resource Allocation in Parallel and Distributed Computing Systems](#)," joint meeting of *ISPDC 2004: Third International Symposium on Parallel and Distributed Computing*, and *HeteroPar '04: Third International Workshop on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Networks*, pp. 2-10, July 2004. Invited keynote presentation by H. J. Siegel.
5. S. Ali, A. A. Maciejewski, H. J. Siegel, and J-K. Kim, "[Robust Resource Allocation for Sensor-Actuator Distributed Computing Systems](#)," *2004 International Conference on Parallel Processing (ICPP 2004)*, pp. 178-185, Aug. 2004.
6. V. Shestak, E. K. P. Chong, A. A. Maciejewski, H. J. Siegel, L. Bemohamed, I-J. Wang, and R. Daley, "[Resource Allocation for Periodic Applications in a Shipboard Environment](#)," *14th Heterogeneous Computing Workshop (HCW 2005)*, in the proceedings of the 19th International Parallel and Distributed Processing Symposium (IPDPS 2005), Apr. 2005.
7. V. Shestak, H. J. Siegel, A. A. Maciejewski, and S. Ali, "[Robust Resource Allocations in Parallel Computing Systems: Model and Heuristics](#)," *8th International Symposium on Parallel Architectures, Algorithms, and Networks (I-SPAN 2005)*, pp. 2-9, Dec. 2005. Invited keynote presentation by H. J. Siegel.
8. V. Shestak, H. J. Siegel, A. A. Maciejewski, and S. Ali, "[The Robustness of Resource Allocations in Parallel and Distributed Computing Systems](#)," *Architecture of Computing Systems - ARCS 2006, 19th International Conference Proceedings*, Lecture Notes in Computer Science 3894, Springer-Verlag, Berlin, Germany, pp. 17-30, Mar. 2006. Invited keynote presentation by H. J. Siegel.
9. V. Shestak, J. Smith, R. Umland, J. Hale, P. Moranville, A. A. Maciejewski, and H. J. Siegel, "[Greedy Approaches to Static Stochastic Robust Resource Allocation for Periodic Sensor Driven Distributed Systems](#)," *2006 International Conference on Parallel and Distributed Processing Technologies and Applications (PDPTA 2006)*, Vol. 1, pp. 3-9, June 2006.

10. V. Shestak, J. Smith, H. J. Siegel, and A. A. Maciejewski, "[A Stochastic Approach to Measuring the Robustness of Resource Allocations in Distributed Systems](#)," *2006 International Conference on Parallel Processing (ICPP 2006)*, pp. 459-467, Aug. 2006.
11. M. Oltikar, J. Brateman, J. White, J. Martin, K. Knapp, A. A. Maciejewski, H. J. Siegel, "[Robust Resource Allocation in Weather Data Processing Systems](#)," *8th Workshop on High Performance Scientific and Engineering Computing (HPSEC 2006)*, in the Proceedings of the 2006 International Conference on Parallel Processing Workshops, pp. 445-454, Aug. 2006.
12. V. Shestak, J. Smith, H. J. Siegel, and A. A. Maciejewski, "[Iterative Algorithms for Stochastically Robust Static Resource Allocation in Periodic Sensor Driven Clusters](#)," *18th IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2006)*, pp. 166-174, Nov. 2006.
13. J. Smith, L. D. Briceño, A. A. Maciejewski, H. J. Siegel, T. Renner, V. Shestak, J. Ladd, A. Sutton, D. Janovy, S. Govindasamy, A. Alqudah, R. Dewri, and P. Prakash, "[Measuring the Robustness of Resource Allocations in a Stochastic Dynamic Environment](#)," *21st International Parallel and Distributed Processing Symposium (IPDPS 2007)*, Mar. 2007.
14. P. Sugavanam, H. J. Siegel, A. A. Maciejewski, M. Oltikar, A. Mehta, R. Pichel, A. Horiuchi, V. Shestak, M. Al-Otaibi, Y. Krishnamurthy, S. Ali, J. Zhang, M. Aydin, P. Lee, K. Guru, M. Raskey, and A. Pippin, "[Robust Static Allocation of Resources for Independent Tasks under Makespan and Dollar Cost Constraints](#)," *Journal of Parallel and Distributed Computing*, Vol. 67, No. 4, pp. 400-416, Apr. 2007.
15. D. L. Janovy, J. Smith, H. J. Siegel, and A. A. Maciejewski, "[Models and Heuristics for Robust Resource Allocation in Parallel and Distributed Computing Systems](#)," *NSF Next Generation Software Program Workshop (NSFNGS 2007)*, in the proceedings of the 21st International Parallel and Distributed Processing Symposium (IPDPS 2007), Mar. 2007, invited.
16. J. Smith, V. Shestak, H. J. Siegel, S. Price, L. Teklits, and P. V. Sugavanam, "[Resource Allocation in a Cluster Based Imaging System](#)," *2007 International Conference on Parallel and Distributed Processing Technologies and Applications (PDPTA 2007)*, June 2007.
17. M. Mehta, J. Smith, H. J. Siegel, A. A. Maciejewski, A. Jaseelan, and B. Ye, "[Dynamic Resource Allocation Heuristics that Manage Tradeoff Between Makespan and Robustness](#)," *Journal of Supercomputing*, Special Issue on Grid Technology, Vol. 42, No. 1, pp. 33-58, 2007.
18. S. Ali, A. A. Maciejewski, and H. J. Siegel, "[Perspectives on Robust Resource Allocation for Heterogeneous Parallel Systems](#)," in *Handbook of Parallel Computing: Models, Algorithms, and Applications*, edited by Sanguthevar Rajasekaran and John Reif, Chapman & Hall/CRC Press, Boca Raton, FL, pp. 41-1 – 41-30, 2008.
19. V. Shestak, E. K. P. Chong, H. J. Siegel, A. A. Maciejewski, L. Benmohamed, I. Wang, and R. Daley, "[A Hybrid Branch-and-Bound and Evolutionary Approach for Allocating Strings of Applications to Heterogeneous Distributed Computing Systems](#)," *Journal of Parallel and Distributed Computing*, Vol. 68, No. 4, pp. 410-426, Apr. 2008.

20. J. Smith, E. K. P. Chong, A. A. Maciejewski, and H. J. Siegel, "[Decentralized Market-Based Resource Allocation in a Heterogeneous Computing System](#)," *22nd International Parallel and Distributed Processing Symposium (IPDPS 2008)*, Apr. 2008.
21. S. Khan, A. A. Maciejewski, H. J. Siegel, and I. Ahmad, "[A Game Theoretical Data Replication Technique for Mobile Ad Hoc Networks](#)," *22nd International Parallel and Distributed Processing Symposium (IPDPS 2008)*, Apr. 2008.
22. J. Smith, H. J. Siegel, and A. A. Maciejewski, "[A Stochastic Model for Robust Resource Allocation in Heterogeneous Parallel and Distributed Computing Systems](#)," *NSF Next Generation Software Program Workshop (NSFNGS 2008)*, sponsor: NSF, to appear in the 22nd International Parallel and Distributed Processing Symposium (IPDPS 2008), Miami, FL, Apr. 2008, invited.
23. S. Ali, J. Kim, H. J. Siegel, and A. A. Maciejewski, "[Static Heuristics for Robust Resource Allocation of Continuously Executing Applications](#)," *Journal of Parallel and Distributed Computing*, Vol. 68, No. 8, pp. 1070-1080, Aug. 2008.
24. V. Shestak, J. Smith, A. A. Maciejewski, and H. J. Siegel, "[Stochastic Robustness Metric and its Use for Static Resource Allocations](#)," *Journal of Parallel and Distributed Computing*, Vol. 68, No. 8, pp. 1157-1173, Aug. 2008.