References

- [1] Itrs (international technology roadmap for semiconductors). *In: International SEMATECH Austin, TX (http://public.itrs.net),* 2011.
- [2] R. Gallagher A. Parekh. A generalized processor sharing approach to flowcontrol in integrated services networks: The single-node case. *IEEE/ACM Transactions on Networking*, 1(3):344–357, 1993.
- [3] L. Abeni. Server mechanisms for multimedia applications. Technical report.
- [4] L. Abeni and G.C. Buttazzo. Integrating multimedia applications in hard realtime systems. In *19th IEEE Real-Time Systems Symposium*, pages 4–13, 1998.
- [5] P. Altenbernd. Deadline-monotonic software scheduling for the co-synthesis of parallel hard real-time systems. In *EDTC '95: 1995 European conference on Design and Test*, page 190, Washington, DC, USA, 1995. IEEE Computer Society.
- [6] J Anderson, V. Bud, and U. C. Devi. An edf-based scheduling algorithm for multiprocessor soft real-time systems. In 17th Euromicro Conference on Real-Time Systems (ECRTS'05), pages 199–208, Washington, DC, USA, 2005. IEEE Computer Society.
- [7] J. Anderson and A. Srinivasan. Early-release fair scheduling. In *12th Euromicro Conference on Real-Time Systems*, pages 35–43, Jun 2000.
- [8] J. Anderson and A. Srinivasan. Mixed pfair/erfair scheduling of asynchronous periodic tasks. *Journal of Computer and System Sciences*, 68(1):157–204, Feb 2004.
- [9] J. H. Anderson, J. M. Calandrino, and U. C. Devi. Real-time scheduling on multicore platforms. 12th IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS'06), 0:179–190, 2006.
- [10] B. Andersson and K. Bletsas. Sporadic multiprocessor scheduling with few preemptions. In 2008 Euromicro Conference on Real-Time Systems, pages 243–252, Washington, DC, USA, 2008. IEEE Computer Society.
- [11] B. Andersson and J. Jonsson. The utilization bounds of partitioned and pfair static-priority scheduling on multiprocessors are 50%. In 15th Euromicro Conference on Real-Time Systems, pages 33–40, Jul 2003.
- [12] B. Andersson and E. Tovar. Multiprocessor scheduling with few preemptions. In 12th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications, pages 322–334, 2006.

- [13] B. Andersson and E. Tovar. Multiprocessor scheduling with few preemptions. In RTCSA '06: 12th IEEE International Conference on Embedded and Real-Time Computing, pages 322–334, Washington, DC, USA, 2006. IEEE Computer Society.
- [14] K. Bletsasand B. Andersson. Notional processors: An approach for multiprocessor scheduling. In 2009 15th IEEE Symposium on Real-Time and Embedded Technology and Applications, RTAS '09, pages 3–12, Washington, DC, USA, 2009. IEEE Computer Society.
- [15] J. Augustine, S. Irani, and C. Swamy. Optimal power-down strategies. In 45th Symp. Foundations of Computer Science (FOCS'04), pages 530–539, 2004.
- [16] H. Aydin. Exact fault-sensitive feasibility analysis of real-time tasks. *IEEE Transactions on Computers*, 56(10):1372–1386, 2007.
- [17] H. Aydin, R. Melhem, D. Mossé, and P. Mejía-Alvarez. Determining optimal processor speeds for periodic real-time tasks with different power characteristics. In ECRTS '01: 13th Euromicro Conference on Real-Time Systems, page 225, Washington, DC, USA, 2001. IEEE Computer Society.
- [18] H. Aydin, R. Melhem, D. Mossé, and P. Mejía-Alvarez. Determining optimal processor speeds for periodic real-time tasks with different power characteristics. In ECRTS '01: 13th Euromicro Conference on Real-Time Systems, page 225, Washington, DC, USA, 2001. IEEE Computer Society.
- [19] S. Banachowski and S.A. Brandt. Toward a taxonomy of time-constrained applications. In Work in Progress 24th IEEE Real-Time Systems Symposium, pages 3–6, 2003.
- [20] P. Baptiste. Scheduling unit tasks to minimize the number of idle periods: A polynomial time algorithm for offline dynamic power management. In 17th annual ACM-SIAM symposium on Discrete algorithm (SODA), pages 364–367, New York, NY, USA, 2006. ACM.
- [21] P. Baptiste, M. Chrobak, and C. Durr. Polynomial time algorithms for minimum energy scheduling. In 15th Annual European Symposium on Algorithms (ESA), pages 136–150, 2007.
- [22] S. Baruah, N. Cohen, C.G. Plaxton, and D. Varvel. Proportionate progress: A notion of fairness in resource allocation. *Algorithmica*, 15(6):600–625, 1996.
- [23] S. Baruah, J. Gehrke, and C.G. Plaxton. Fast scheduling of periodic tasks on multiple resources. In 9th International Parallel Processing Symposium, pages 280–288, Apr 1995.
- [24] S.K. Baruah, J. Gehrke, C.G. Plaxton, I. Stoica, H.M. Abdel-Wahab, and K. Jeffay. Fair on-line scheduling of a dynamic set of tasks on a single resource. *Information Processing Letters*, 64(1):43–51, 1997.
- [25] M. A. Bender, R. Clifford, and K. Tsichlas. Scheduling algorithms for procrastinators. *Journal of Scheduling*, 11(2):95–104, 2008.

- [26] E. Berg and E. Hagersten. Statcache: a probabilistic approach to efficient and accurate data locality analysis. In *ISPASS '04: 2004 IEEE International Symposium* on Performance Analysis of Systems and Software, pages 20–27, Washington, DC, USA, 2004. IEEE Computer Society.
- [27] K. Bletsas and B. Andersson. Preemption-light multiprocessor scheduling of sporadic tasks with high utilisation bound. In 2009 30th IEEE Real-Time Systems Symposium, RTSS '09, pages 447–456, Washington, DC, USA, 2009. IEEE Computer Society.
- [28] R. Bryant and B. Hartner. Java technology, threads, and scheduling in linux. In *IBM developerWorks Library Paper, IBM Linux Technology Center*, Jan 2000.
- [29] A. Burns, R. Davis, and S. Punnekkat. Feasibility analysis of fault-tolerant realtime task sets. In 8th Euromicro Workshop on Real-Time Systems, pages 29–33, Washington, DC, USA, 1996. IEEE Computer Society.
- [30] G. Buttazzo and L. Abeni. Adaptive rate control through elastic scheduling. In 39th IEEE Conference on Decision and Control, Sydney, Australia, vol. 5, pages 4883–4888, 2000.
- [31] G. Buttazzo, G. Lipari, M. Caccamo, and L. Abeni. Elastic scheduling for flexible workload management. *IEEE Transactions on Computers*, 51(3):289–302, 2002.
- [32] G.C. Buttazzo. Hard Real-Time Computing Systems: Predictable Scheduling Algorithms and Applications. Kluwer, 1997.
- [33] J. Carlson, T. Lennvall, and G. Fohler. Value based overload handling of aperiodic tasks in offline scheduled real-time systems. In Work-in-progress Session, 13th Euromicro Conference on Real-Time Systems, Delft, The Netherlands, 2001.
- [34] John Carpenter, Shelby Funk, Philip Holman, Anand Srinivasan, James Anderson, and Sanjoy Baruah. A categorization of real-time multiprocessor scheduling problems and algorithms, 2004.
- [35] J. Chen and T. Kuo. Procrastination for leakage-aware rate-monotonic scheduling on a dynamic voltage scaling processor. In ACM SIGPLAN/SIGBED Conference on Languages, Compilers, and Tools for Embedded Systems (LCTES), pages 153–162, 2006.
- [36] J. Chen and T. Kuo. Procrastination determination for periodic real-time tasks in leakage-aware dynamic voltage scaling systems. In ICCAD '07: 2007 IEEE/ACM international conference on Computer-aided design, pages 289–294, Piscataway, NJ, USA, 2007. IEEE Press.
- [37] H. Cho, B. Ravindran, and E. Jensen. An optimal real-time scheduling algorithm for multiprocessors. In *IEEE Real-Time Systems Symposium (RTSS)*, pages 101– 110, 2006.
- [38] K. Choi, G. Jung, T. Kim, and S.Jung. Real-time scheduling algorithm for minimizing maximum weighted error with o(n lg n + cn) complexity. *Information Processing Letters*, 67:311–315, 1998.

- [39] M. Chtepen, F.H.A. Claeys, B. Dhoedt, F. Turck, P. Demeester, and P.A. Vanrolleghem. Adaptive task checkpointing and replication: Toward efficient faulttolerant grids. *IEEE Transactions on Parallel and Distributed Systems*, 20(2):180– 190, 2009.
- [40] R.W. Conway, W.L. Maxwell, and L.W. Miller. *Theory of Scheduling*. Dover Publications, Inc., 31 East 2nd Street, Mineola, N.Y. 11501, 2003.
- [41] A. Demers, S. Keshav, and S. Shenker. Analysis and simulation of a fair queueing algorithm. In ACM SIGCOMM '89, Austin, TX, pages 1–12, Sep 1989.
- [42] Z. Deng and J.W.S. Liu. Scheduling real-time applications in open environment. In 18th IEEE Real-Time Systems Symposium, pages 308–319, Dec 1997.
- [43] Z. Deng, J.W.S. Liu, and J. Sun. A scheme for scheduling hard real-time applications in open system environment. In 9th Euromicro Workshop on Real-Time Systems, pages 191–199, 1997.
- [44] S. Dhall and C. Liu. On a real-time scheduling problem. *Operations research*, 26(1):127–140, 1978.
- [45] A. Fedorova, M. Seltzer, C. Small, and D. Nussbaum. Performance of multithreaded chip multiprocessors and implications for operating system design. In USENIX 2005 Annual Technical Conference, pages 395–398, Apr 2005.
- [46] C.J. Fidge. Real-time scheduling theory. Technical Report 02-19, Apr 2002.
- [47] S. Gopalakrishnan and X. Liu. Reclaiming spare capacity and improving aperiodic response times in real-time environments. article id 391215. EURASIP Journal of Embedded Systems, 2011.
- [48] A. Gupta, A. Tucker, and S. Urushibara. The impact of operating system scheduling policies and synchronization methods of the performance of parallel application. In ACM SIGMETRICS Conference on Measurement and Modeling of Computer Systems, pages 120–132, 1991.
- [49] T. Dohi H. Okamura *. Comprehensive evaluation of aperiodic checkpointing and rejuvenation schemes in operational software system. *Journal of Systems and Software*, 83(9):1591–1604, 2010.
- [50] J. Hansson, M. Thuresson, and S.H. Son. Imprecise task scheduling and overload management using or-uld. In 7th International Conference on Real-Time Computing Systems and Applications, Cheju Island, S. Korea, pages 307–314, 2000.
- [51] P. Holman and J. H. Anderson. Group-based pfair scheduling. *Real-Time Systems*, 32:125–168, February 2006.
- [52] S. Irani and K. R. Pruhs. Algorithmic problems in power management. SIGACT News, 36(2):63–76, 2005.
- [53] S. Irani, S. Shukla, and R. Gupta. Online strategies for dynamic power management in systems with multiple power-saving states. *Trans. on Embedded Computing Sys.*, 2(3):325–346, 2003.

- [54] S. Irani, S. Shukla, and R. Gupta. Online strategies for dynamic power management in systems with multiple power-saving states. *Trans. on Embedded Computing Sys.*, 2(3):325–346, 2003.
- [55] K. Jeffay. Scheduling sporadic tasks with shared resources in hard real-time systems. In *13th IEEE Real-Time Systems Symposium*, pages 89–98, Dec 1992.
- [56] K. Jeffay and D. Bennett. A rate-based execution abstraction for multimedia computing. In *Network and Operating System Support for Digital Audio and Video*, pages 64–75, 1995.
- [57] K. Jeffay and S. Goddard. A theory of rate-based execution. In 20th IEEE Real-Time Systems Symposium, pages 304–314, 1999.
- [58] K. Jeffay and S. Goddard. Rate-based resource allocation models for embedded systems. *Lecture Notes in Computer Science*, 2211:204–, 2001.
- [59] K. Jeffay and G. Lamastra. A comparative study of the realization of ratebased computing services in general purpose operating systems. In 7th IEEE International Conference on Real-Time Computing Systems and Applications, pages 81–90, Dec 2000.
- [60] R. Jejurikar and R. Gupta. Procrastination scheduling in fixed priority real-time systems. ACM SIGPLAN Notices, 39(7):57–66, 2004.
- [61] R. Jejurikar and R. Gupta. Dynamic slack reclamation with procrastination scheduling in real-time embedded systems. In DAC '05: 42nd annual conference on Design automation, pages 111–116, New York, NY, USA, 2005. ACM.
- [62] R. Jejurikar, C. Pereira, and R. Gupta. Leakage aware dynamic voltage scaling for real-time embedded systems. In DAC '04: 41st annual conference on Design automation, pages 275–280, New York, NY, USA, 2004. ACM.
- [63] R. Jurgen. *Electronic Braking, Traction, and Stability Controls, Vol* 2. SAE Technical Paper PT-129, 2006.
- [64] S. Kato and N. Yamasaki. Real-time scheduling with task splitting on multiprocessors. In 13th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications, RTCSA '07, pages 441–450, Washington, DC, USA, 2007. IEEE Computer Society.
- [65] S. Kato and N. Yamasaki. Portioned edf-based scheduling on multiprocessors. In 8th ACM international conference on Embedded software, EMSOFT '08, pages 139–148, New York, NY, USA, 2008. ACM.
- [66] K.Funaoka, S. Kato, and N. Yamasaki. Work-conserving optimal real-time scheduling on multiprocessors. In 20th Euromicro Conference on Real-Time Systems (ECRTS'08), pages 13–22, Washington, DC, USA, 2008. IEEE Computer Society.
- [67] N.S. Kim, T. Austin, D. Blaauw, T. Mudge, K. Flautner, J.S. Hu, M.J. Irwin, M. Kandemir, and V. Narayanan. Leakage current: Moore's law meets static power. *Computer*, 36:68–75, 2003.

- [68] S. Kim, D. Chandra, and Y. Solihin. Fair cache sharing and partitioning on a chip multiprocessor architecture. In 13th International Conference on Parallel Architecture and Compilation Techniques, pages 111–122, 2004.
- [69] T. Kimbrel, B. Schieber, and M. Sviridenko. Minimizing migrations in fair multiprocessor scheduling of persistent tasks. *Journal of Scheduling*, 9(4):365– 379, Aug 2006.
- [70] K. Klonowska, L. Lundberg, and H. Lennerstad. The maximum gain of increasing the number of preemptions in multiprocessor scheduling. *Acta Inf.*, 46:285–295, June 2009.
- [71] S.W. Kwak, B.J. Choi, and B.K. Kim. An optimal checkpointing-strategy for real-time control systems under transient faults. *IEEE Transactions on Reliability*, 50(3):293–301, 2001.
- [72] H. Kweon, Y. Do, J. Lee, and B. Ahn. An efficient power-aware scheduling algorithm in real time system. In *PacRim* '07: *IEEE Pacific Rim Conference on Communications, Computers and Signal Processing*, pages 350–353, Aug 2007.
- [73] P. Langen and B. Juurlink. Leakage-aware multiprocessor scheduling. *Journal of Signal Processing Systems*, 57:73–88, October 2009.
- [74] H. Lee, H. Shin, and S. Min. Worst case timing requirement of real-time tasks with time redundancy. In 6th International Conference on Real-Time Computing Systems and Applications, pages 410–414, Washington, DC, USA, 1999. IEEE Computer Society.
- [75] I. Lee, J. Leung, and S. H. Son, editors. *Handbook of Real-Time and Embedded Systems*. Chapman & Hall/CRC Press, 2007.
- [76] Y. Lee, K. P. Reddy, and C. M. Krishna. Scheduling techniques for reducing leakage power in hard real-time systems. In 15th Euromicro Conference on Real-Time Systems (ECRTS), pages 105–112, 2003.
- [77] J. Leung. A new algorithm for scheduling periodic, real-time tasks. *Algorithmica*, 4(1):209–219, 1989.
- [78] G. Levin, S. Funk, C. Sadowski, I. Pye, and S. Brandt. Dp-fair: A simple model for understanding optimal multiprocessor scheduling. In 22nd Euromicro Conference on Real-Time Systems, pages 3–13, Washington, DC, USA, 2010. IEEE Computer Society.
- [79] K.J. Lin, S. Natarajan, and J.W.S. Liu. Imprecise results: utilizing partial computations in real-time systems. In *RTSS '87: 8th Real-Time Systems Symposium*, pages 210–217, 1987.
- [80] C. L. Liu and J. W. Layland. Scheduling algorithms for multiprogramming in a hard-real-time environment. *Journal of the ACM*, 20(1):46–61, 1973.
- [81] J. W. S. Liu. *Real-Time Systems*. Prentice Hall PTR, Upper Saddle River, NJ, USA, 2000.

- [82] X. Liu and S. Goddard. Supporting dynamic qos in linux. In 10th IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS'04), page 246, Washington, DC, USA, 2004. IEEE Computer Society.
- [83] X. Liu and S. Goddard. Scheduling legacy multimedia applications. *Journal of Systems and Software*, 75(3):319–328, Mar 2005.
- [84] J. M. Lopez, M. García, J. L. Diaz, and D. F. Garcia. Utilization bounds for multiprocessor rate-monotonic scheduling. *Real-Time Systems Journal*, 24:5–28, 2003.
- [85] J.M. Lopez, M. Garcia, J.L. Diaz, and D.F. Garcia. Worst-case utilization bound for edf scheduling on real-time multiprocessor systems. In 12th Euromicro Conference on Real-Time Systems, pages 25–33, Jun 2000.
- [86] Z. Lu, Y. Zhang, M. Stan, J. Lach, and K. Skadron. Procrastinating voltage scheduling with discrete frequency sets. In *DATE '06: conference on Design*, *automation and test in Europe*, pages 456–461, 3001 Leuven, Belgium, Belgium, 2006. European Design and Automation Association.
- [87] P. Lun. Report on simple one-dimensional on-line bin packing algorithms. http://www.tcs.fudan.edu.cn/rudolf/Courses/Online/Online03/ po_report.pdf.
- [88] J. Malkevitch. Bin packing and machine scheduling. *Feature Column from the AMS: Monthly Essays on Mathematical Topics,* Jun 2004.
- [89] P. Mejia-Alvarez, R. Melhem, D. Mosse, and H. Aydin. An incremental server for scheduling overloaded real-time systems. *IEEE Transactions on Computers*, 52(10):1347–1361, 2003.
- [90] A. Merchand and M. Chetto. Dynamic scheduling of periodic skippable tasks in an overloaded real-time system. In *AICCSA 2008: IEEE/ACS International conference on Computer Systems and Applications*, pages 456–464, 2008.
- [91] A. K. Mok. Fundamental design problems of distributed systems for the hardreal-time environment. Technical report, Cambridge, MA, USA, 1983.
- [92] N. Naksinehaboon, M. Paun, R. Nassar, B. Leangsuksun, and S. Scott. High performance computing systems with various checkpointing schemes. *International Journal of Computers, Communications & Control*, 4(4):386–400, 2009.
- [93] H.S. Negi, T.Mitra, and A. Roychoudhury. Accurate estimation of cache-related preemption delay. In *CODES+ISSS '03: 1st IEEE/ACM/IFIP international conference on Hardware/software codesign and system synthesis*, pages 201–206, 2003.
- [94] J. Nieh, C. Vaill, and H. Zhong. Virtual-time round-robin: An o(1) proportional share scheduler. In USENIX Annual Technical Conference, pages 245–259, Jun 2001.
- [95] J. Nieh, C. Vaill, and H. Zhong. Group ratio round-robin: An O(1) proportional share scheduler. In *General Track: 2004 USENIX Annual Technical Conference*, pages 245–259, Jun 2004.

- [96] D. Niz and R. Rajkumar. Partitioning bin-packing algorithms for distributed real-time systems. *International Journal of Embedded Systems*, 2(3):196–208, 2006.
- [97] D. Oh and T. P. Bakker. Utilization bounds for n-processor rate monotonescheduling with static processor assignment. *Real-Time Systems Journal.*, 15:183–192, 1998.
- [98] A. Oliner, L. Rudolph, and R. Sahoo. Cooperative checkpointing theory. In 20th International Parallel and Distributed Processing Symposium (IPDPS '06), pages 132–132, 2006.
- [99] A. Oliner and R. Sahoo. Evaluating cooperative checkpointing for supercomputing systems. In 20th International Parallel and Distributed Processing Symposium (IPDPS '06), pages 363–363, 2006.
- [100] J.S. Plank, Y. Chen, K. Li, M. Beck, and G. Kingsley. Memory exclusion: Optimizing the performance of checkpointing systems. *Software: Practice and Experience*, 29(2):125–142, 1999.
- [101] S. Punnekkat, A. Burns, and R. Davis. Analysis of checkpointing for real-time systems. *International Journal of Time-Critical Computing Systems*, 20(1):83–102, 2001.
- [102] S. Ramabhadran and J. Pasquale. Stratified round robin: A low complexity packet scheduler with bandwidth fairness and bounded delay. In ACM SIG-COMM, pages 239–249, 2003.
- [103] P. Ramanathan and M. Hamdaoui. A dynamic priority assignment technique for streams with (m, k)-firm deadlines. *IEEE Transaction on Computers*, 44(12):1443– 1451, 1995.
- [104] J. Regehr, M. Jones, and J. Stankovic. Operating system support for multimedia: The programming model matters. Technical Report Microsoft Research (MSR-TR-2000-89), Sep 2000.
- [105] A. Sarkar, P. P. Chakrabarti, and S. Ghose. Partition oriented frame based fair scheduler. *Journal of Parallel Distributed Computing*, 70(7):707–718, 2010.
- [106] A. Sarkar, P.P. Chakrabarti, and R. Kumar. Frame-based proportional roundrobin. *IEEE Transactions on Computers*, 55(9):1121–1129, 2006.
- [107] A. Sarkar, S. Swaroop, S. Ghose, and P. P. Chakrabarti. Erfair scheduler with processor shutdown. In 16th International Conference on High Performance Computing (HiPC '09), pages 4–12, 2009.
- [108] Y. Shin, K. Choi, and T. Sakurai. Power optimization of real-time embedded systems on variable speed processors. In *ICCAD '00: 2000 IEEE/ACM international conference on Computer-aided design*, pages 365–368, Piscataway, NJ, USA, 2000. IEEE Press.
- [109] Y. Shin, K. Choi, and T. Sakurai. Power optimization of real-time embedded systems on variable speed processors. In *ICCAD '00: 2000 IEEE/ACM international conference on Computer-aided design*, pages 365–368, Piscataway, NJ, USA, 2000. IEEE Press.

- [110] T. Simunic, L. Benini, P.W. Glynn, and G. De Micheli. Dynamic power management for portable systems. In 6th annual international conference on Mobile Computing and Networking, pages 11–19, 2000.
- [111] M. Spuri and G.C. Buttazzo. Efficient aperiodic service under earliest deadline scheduling. In *15th IEEE Real-Time Systems Symposium*, pages 2–11, Dec 1994.
- [112] M. Spuri, G.C. Buttazzo, and F. Sensini. Robust aperiodic scheduling under dynamic priority systems. In 16th IEEE Real-Time Systems Symposium, pages 210–221, 1995.
- [113] M. S. Squillante and E. D. Lazowska. Using processor-cache affinity information in shared-memory multiprocessor scheduling. *IEEE Transactions on Parallel and Distributed Systems*, 4(2):131 – 143, 1993.
- [114] M.S. Squillante and R.D. Nelson. Analysis of task migration in shared-memory multiprocessor scheduling. In ACM SIGMETRICS Conference on Measurement and Modeling of Computer Systems, pages 143–155, 1991.
- [115] A. Srinivasan, P. Holman, and J. Anderson. The case for fair multiprocessor scheduling. In 11th International Workshop on Parallel and Distributed Real-time Systems, Nice, France, Apr 2003.
- [116] A. Srinivasan, P. Holman, and J. H. Anderson. Integrating aperiodic and recurrent tasks on fair-scheduled multiprocessors. In 14th Euromicro Conference on Real-Time Systems, 2002.
- [117] J. Stankovic. Misconceptions about real-time computing: A serious problem for next generation systems. *IEEE Computer*, 28(6):10–19, Oct 1988.
- [118] J.A. Stankovic. Continuous and multimedia os support in real-time control applications. In HOTOS '95: Fifth Workshop on Hot Topics in Operating Systems (HotOS-V), page 8, Washington, DC, USA, 1995. IEEE Computer Society.
- [119] I. Stoica, H. Abdel-Wahab, and K. Jeffay. On the duality between resource reservation and proportional share resource allocation. Technical Report TR_96_19, 1996.
- [120] I. Stoica, H. Abdel-Wahab, K.Jeffay, S.Baruah, J. Gehrke, and C.Plaxton. A proportional share resource allocation algorithm for real-time, time-shared systems. In 17th IEEE Real-Time Systems Symposium, pages 288–299, Dec 1996.
- [121] B.R. Swim, M. Tayli, M. Benmaiza, and M.C. Woodward. Avoiding deadline decay under transient overloads. In 3rd workshop on Parallel and Distributed Real-Time Systems, pages 198–200, 1995.
- [122] J. Torrellas, A. Tucker, and A. Gupta. Benefits of cache-affinity scheduling in shared-memory multiprocessors: a summary. SIGMETRICS Perform. Eval. Rev., 21(1):272–274, 1993.
- [123] C. A. Waldspurger. Lottery and stride scheduling: Flexible proportional-share resource management. Technical Report MIT/LCS/TR-667, 1995.

- [124] R. Wilhelm, J. Engblom, A. Ermedahl, N. Holsti, S. Thesing, D. Whalley, G. Bernat, C. Ferdinand, R. Heckmann, T. Mitra, F. Mueller, I. Puaut, P. Puschner, J. Staschulat, and P. Stenstrom. The worst-case execution-time problem overview of methods and survey of tools. ACM Transactions on Embedded Computing Systems (TECS), 7(3):1–53, 2008.
- [125] M. Wu and M. Shih. Simulated and experimental study of hydraulic anti-lock braking system using sliding-mode pwm control. *Mechatronics*, 13(4):331–351, 2003.
- [126] Y. Xiang, Z. Li, and H. Chen. Optimizing adaptive checkpointing schemes for grid workflow systems. In 5th International Conference on Grid and Cooperative Computing Workshops (GCCW'06), pages 181–188, 2006.
- [127] Y. Zhang and K. Chakrabarty. Fault recovery based on checkpointing for hard real-time embedded systems. In 18th IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems, pages 320–327, Washington, DC, USA, 2003. IEEE Computer Society.
- [128] D. Zhu, D. Moss´e, and R. Melhem. Multiple-resource periodic scheduling problem: how much fairness is necessary? In *IEEE Real-Time Systems Symposium*, pages 142–151, Dec 2003.
- [129] A. Ziv and J. Bruck. An on-line algorithm for checkpoint placement. *IEEE Transactions on Computers*, 46(9):976–985, 1997.