

Liste des articles scientifiques 2014 du CEA LIST SYSTÈMES EMBARQUÉS

Conference

Aminot, A.; Lhuillier, Y.; Chateigner, A. & Charles, H.-P.

On the advantage of time-varying diversity of workload on Functionally Asymmetric multi-core
ACM International Conference Proceeding Series, **2014**, 11-13

[url](#) | [doi](#)

Article

Carbon, A.; Lhuillier, Y. & Charles, H.-P. c.

Hardware Acceleration of Red-Black Tree Management and Application to Just-In-Time Compilation
Journal of Signal Processing Systems, **2014**

[url](#) | [doi](#)

Conference

Clermidy, F.; Heliot, R.; Valentian, A.; Gamrat, C.; Bichler, O.; Duranton, M.; Blehadj, B. & Temam, O.
Advanced technologies for brain-inspired computing

Proceedings of the Asia and South Pacific Design Automation Conference, ASP-DAC, **2014**, 563-569

[url](#) | [doi](#)

Conference

Cudennec, L.; Dubrulle, P.; Galea, F.; Goubier, T. & Sirdey, R.

Generating code and memory buffers to reorganize data on many-core architectures
Procedia Computer Science, Elsevier, **2014**, 29, 1123-1133

[url](#) | [doi](#)

Conference

Dkhil, A.; Do, X.; Dubrulle, P.; Louise, S. & Rochange, C.

Self-timed periodic scheduling for a cyclo-static dataflow model
Procedia Computer Science, Elsevier, **2014**, 29, 1134-1145

[url](#) | [doi](#)

Conference

Dupret, A.; Verdant, A.; Millet, L.; Alacoque, L.; Peizerat, A.; Benetti, M.; Laforest, T.; Guicquero, W. & Tchagaspanian, M.

Niemier M., P. W. (Ed.)

Processing next to the pixel: Lessons from some developments at CEA-Leti

International Workshop on Cellular Nanoscale Networks and their Applications, IEEE Computer Society, **2014**

[url](#) | [doi](#)

Conference

Endo, F.; Courousse, D. & Charles, H.-P.

Veidenbaum A.V., G. C. (Ed.)

Micro-architectural simulation of in-order and out-of-order ARM microprocessors with gem5

Proceedings - International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation, SAMOS 2014, Institute of Electrical and Electronics Engineers Inc., **2014**, 266-273

[url](#) | [doi](#)

Article

Evain, S.; Savin, V. & Gherman, V.

Error correction schemes with erasure information for fast memories

Journal of Electronic Testing: Theory and Applications (JETTA), Kluwer Academic Publishers, **2014**, 30, 183-192

[url](#) | [doi](#)

Conference

Goubier, T.; Couroussé, D. & Azaiez, S.

Ī,C: C with process network extensions for embedded manycores

Procedia Computer Science, Elsevier, **2014**, 29, 1100-1112

[url](#) | [doi](#)

Conference

Guerre, A.; Acquaviva, J.-T. & Lhuillier, Y.

A unified methodology for a fast benchmarking of parallel architecture

Proceedings -Design, Automation and Test in Europe, DATE, Institute of Electrical and Electronics Engineers Inc., **2014**

[url](#) | [doi](#)

Article

Imperiale, S. b. & Joly, P.

Mathematical modeling of electromagnetic wave propagation in heterogeneous lossy coaxial cables with variable cross section

Applied Numerical Mathematics, Elsevier, **2014**, 79, 42-61

[url](#) | [doi](#)

Conference

Jan, M.; Zaourar, L.; Legout, V. & Pautet, L.

Handling criticality mode change in time-triggered systems through linear programming

Ada User Journal, Ada-Europe, **2014**, 35, 133-137

[url](#)

Article

Legout, V. b.; Jan, M. & Pautet, L.

Scheduling algorithms to reduce the static energy consumption of real-time systems

Real-Time Systems, Kluwer Academic Publishers, **2014**

[url](#) | [doi](#)

Conference

Lomüller, V. & Charles, H.-P.

A LLVM extension for the generation of low overhead runtime program specializer

ACM International Conference Proceeding Series, **2014**, 14-16

[url](#) | [doi](#)

Conference

Lomüller, V.; Ledru, S. & Charles, H.-P.

Scilab on a hybrid platform

Advances in Parallel Computing, Elsevier, **2014**, 25, 743-752

[url](#) | [doi](#)

Conference

Maurras, J.-F.; Nguyen, T. & Nguyen, V.

On the linear description of the Huffman trees polytope

Discrete Applied Mathematics, **2014**, 164, 225-236

[url](#) | [doi](#)

Conference

Roclin, D.; Bichler, O.; Gamrat, C. & Klein, J.-O.

Sneak paths effects in CBRAM memristive devices arrays for spiking neural networks

Proceedings of the 2014 IEEE/ACM International Symposium on Nanoscale Architectures, NANOARCH 2014, IEEE Computer Society, **2014**, 13-18

[url](#) | [doi](#)

Conference

Sarrazin, S.; Evain, S.; Miro-Panades, I.; Valentian, A.; Pajaniradja, S.; De Barros Naviner, L. & Gherman, V.

Shadow-scan design with low latency overhead and in-situ slack-time monitoring

Proceedings - 2014 19th IEEE European Test Symposium, ETS 2014, IEEE Computer Society, **2014**

[url](#) | [doi](#)

Conference

Sarrazin, S. c.; Evain, S.; Miro-Panades, I.; De Barros Naviner, L. & Gherman, V.

Fip-flop selection for in-situ slack-time monitoring based on the activation probability of timing-critical paths

Proceedings of the 2014 IEEE 20th International On-Line Testing Symposium, IOLTS 2014, IEEE Computer Society, **2014**, 160-163

[url](#) | [doi](#)

Conference

Sassolas, T.; Sandionigi, C.; Guerre, A.; Aminot, A.; Vivet, P.; Boussetta, H.; Ferro, L. & Peltier, N.

Early design stage thermal evaluation and mitigation: The locomotiv architectural case

Proceedings - Design, Automation and Test in Europe, DATE, Institute of Electrical and Electronics Engineers Inc., **2014**

[url](#) | [doi](#)

Article

AdjÃ©, A.; Gaubert, S. & Goubault, E.

Computing the smallest fixed point of order-preserving nonexpansive mappings arising in positive stochastic games and static analysis of programs

Journal of Mathematical Analysis and Applications, **2014**, 410, 227-240

[url](#) | [doi](#)

Conference

Bannour, B.; Escobedo, J.; Gaston, C.; Gall, P. & Pedroza, G.

Designing sequence diagram models for robustness to attacks

Proceedings - IEEE 7th International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2014, IEEE Computer Society, **2014**, 26-33

[url](#) | [doi](#)

Conference

Bardin, S.; Chebaro, O.; Delahaye, M. & Kosmatov, N.

An all-in-one toolkit for automated white-box testing

Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Springer Verlag, **2014**, 8570 LNCS, 53-60

[url](#) | [doi](#)

Conference

Bardin, S.; Kosmatov, N. & Cheynier, F.

Efficient leveraging of symbolic execution to advanced coverage criteria

Proceedings - IEEE 7th International Conference on Software Testing, Verification and Validation, ICST 2014, IEEE Computer Society, 2014, 173-182

[url](#) | [doi](#)

Conference

Bencomo, N. & Belaggoun, A.

A world full of surprises: Bayesian theory of surprise to quantify degrees of uncertainty

36th International Conference on Software Engineering, ICSE Companion 2014 - Proceedings, Association for Computing Machinery, 2014, 460-463

[url](#) | [doi](#)

Conference

Blazy, S.; Böhler, D. & Yakobowski, B.

Improving static analyses of C programs with conditional predicates

Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Springer Verlag, 2014, 8718 LNCS, 140-154

[url](#) | [doi](#)

Article

Bobot, F.; Filiâtre, J.-C. c. d.; Marché, C. c. d. & Paskevich, A. c. d.

Let's verify this with Why3

International Journal on Software Tools for Technology Transfer, 2014

[url](#) | [doi](#)

Article

Cachera, D. b.; Jensen, T. c.; Jobin, A. b. & Kirchner, F.

Inference of polynomial invariants for imperative programs: A farewell to Gröbner bases

Science of Computer Programming, 2014

[url](#) | [doi](#)

Conference

Cachera, D. b.; Jensen, T. c.; Jobin, A. b. & Kirchner, F.

Inference of polynomial invariants for imperative programs: A farewell to Gröbner bases

Science of Computer Programming, Elsevier, 2014, 93, 89-109

[url](#) | [doi](#)

Article

Chebaro, O.; Cuoq, P.; Kosmatov, N.; Marre, B.; Pacalet, A. d.; Williams, N. & Yakobowski, B.

Behind the scenes in SANTE: A combination of static and dynamic analyses

Automated Software Engineering, Kluwer Academic Publishers, 2014, 21, 107-143

[url](#) | [doi](#)

Conference

Correnson, L.

Qed. Computing what remains to be proved

Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Springer Verlag, 2014, 8430 LNCS, 215-229

[url](#) | [doi](#)

Article

Delahaye, M.; Botella, B. & Gotlieb, A.
Infeasible path generalization in dynamic symbolic execution
Information and Software Technology, **2014**

[url](#) | [doi](#)

Article

García, A. b.
Effective connectivity at synaptic level in humans: a review and future prospects
Biological Cybernetics, **2014**

[url](#) | [doi](#)

Conference

Goubault, E.; Jourdan, J.-H.; Putot, S. & Sankaranarayanan, S.
Finding non-polynomial positive invariants and Lyapunov functions for polynomial systems through Darboux polynomials
Proceedings of the American Control Conference, Institute of Electrical and Electronics Engineers Inc., **2014**, 3571-3578

[url](#) | [doi](#)

Conference

Goubault, E.; Mullier, O.; Putot, S. & Kieffer, M.
Inner approximated reachability analysis
HSCC 2014 - Proceedings of the 17th International Conference on Hybrid Systems: Computation and Control (Part of CPS Week), Association for Computing Machinery, **2014**, 163-172

[url](#) | [doi](#)

Article

Kosmatov, N.; Lemerre, M. & Alec, C.
A case study on verification of a cloud hypervisor by proof and structural testing
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Springer Verlag, **2014**, 8570 LNCS, 158-164

[url](#) | [doi](#)

Conference

Kosmatov, N. & Signoles, J.
Runtime assertion checking and its combinations with static and dynamic analyses tutorial synopsis
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Springer Verlag, **2014**, 8570 LNCS, 165-168

[url](#) | [doi](#)

Article

Le Cadre, H.
Infrastructure topology optimization under competition through cross-entropy
Journal of the Operational Research Society, Palgrave Macmillan Ltd., **2014**, 65, 824-841

[url](#) | [doi](#)

Conference

Mehiaoui, A.; Tucci-Piergiovanni, S.; Mraidha, C. & Babau, J.-P.

Extending response-time analysis for the automatic synthesis of functional graphs into fixed-priority distributed systems

Proceedings of the 9th IEEE International Symposium on Industrial Embedded Systems, SIES 2014, IEEE Computer Society, 2014, 122-132

[url](#) | [doi](#)

Article

Mimram, S.

Towards 3-dimensional rewriting theory

Logical Methods in Computer Science, Logical Methods in Computer Science, 2014, 10

[url](#) | [doi](#)

Conference

Mzid, R.; Mraidha, C.; Babau, J.-P. & Abid, M.

SRMP: A software pattern for deadlocks prevention in real-time concurrency models

QoSA 2014 - Proceedings of the 10th International ACM SIGSOFT Conference on Quality of Software Architectures (Part of CompArch 2014), Association for Computing Machinery, 2014, 139-144

[url](#) | [doi](#)

Conference

Petiot, G. b.; Kosmatov, N.; Giorgetti, A. c. & Julliand, J.

How test generation helps software specification and deductive verification in Frama-C

Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Springer Verlag, 2014, 8570 LNCS, 204-211

[url](#) | [doi](#)

Conference

Tatibouët, J.; Cuccuru, A.; Gérard, S. & Terrier, F.

Towards a systematic, tool-independent methodology for defining the execution semantics of UML profiles with fUML

MODELSWARD 2014 - Proceedings of the 2nd International Conference on Model-Driven Engineering and Software Development, SciTePress, 2014, 182-192

[url](#)

Article

Yildirim, K. & Gökçan, O. b.

Efficient time synchronization in a wireless sensor network by adaptive value tracking

IEEE Transactions on Wireless Communications, Institute of Electrical and Electronics Engineers Inc., 2014, 13, 3650-3664

[url](#) | [doi](#)

Conference

Schultz, E.; Simon, A.-C.; Strola, S.; Perenon, R.; Espagnon, I.; Allier, C.; Claustre, P.; Jary, D. & Dinten, J.-M.

A novel method for single bacteria identification by Raman spectroscopy

Progress in Biomedical Optics and Imaging - Proceedings of SPIE, SPIE, 2014, 8939

[url](#) | [doi](#)

Article

Stan, O.; Sirdey, R.; Carlier, J. & Nace, D.

The robust binomial approach to chance-constrained optimization problems with application to stochastic

partitioning of large process networks

Journal of Heuristics, **2014**, 1-30

[url](#) | [doi](#)

Conference

Strola, S.; Marcoux, P.; Schultz, E.; Perenon, R.; Simon, A.-C.; Espagnon, I.; Allier, C. & Dinten, J.-M.

Differentiating the growth phases of single bacteria using Raman spectroscopy

Progress in Biomedical Optics and Imaging - Proceedings of SPIE, SPIE, **2014**, 8939

[url](#) | [doi](#)

Conference

Ventroux, N.; Peeters, J.; Sassolas, T. & Hoe, J.

Veidenbaum A.V., G. C. (Ed.)

Highly-parallel special-purpose multicore architecture for SystemC/TLM simulations

Proceedings - International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation, SAMOS 2014, Institute of Electrical and Electronics Engineers Inc., **2014**, 250-257

[url](#) | [doi](#)

Conference

Vincent, A.; Larroque, J.; Zhao, W.; Romdhane, N.; Bichler, O.; Gamrat, C.; Klein, J.-O.; Galdin-Retailleau, S. & Querlioz, D.

Spin-transfer torque magnetic memory as a stochastic memristive synapse

Proceedings - IEEE International Symposium on Circuits and Systems, Institute of Electrical and Electronics Engineers Inc., **2014**, 1074-1077

[url](#) | [doi](#)