

NCCR MICS – Mobile Information and Communication Systems

Most important publications

Selecting 25 out of 1700 publications is a difficult task. We attempted to create a selection that is balanced over time, areas and participating groups.

Year	Author(s)	Title	Conference, journal
2002	S. Capkun, M. Hamdi, J.-P. Hubaux	GPS-free Positioning in Mobile Ad-Hoc Networks	Cluster Computing, vol. 5, no 2, 2002
2002	A. Popovici, T. R. Gross, G. Alonso	Dynamic weaving for aspect-oriented programming	Aspect-Oriented Software Development Conference (AOSD), 2002
2003	K Aberer, P Cudré-Mauroux, M Hauswirth	The chatty web: Emergent semantics through gossiping	International Conference on World Wide Web (WWW), 2003
2004	K. Römer, F. Mattern	The Design Space of Wireless Sensor Networks	IEEE Wireless Communications, Vol. 11, No. 6, pp. 54-61, 2004
2005	O. Dousse, F. Baccelli, and P. Thiran	Impact of interferences on connectivity in ad hoc networks	IEEE/ACM Transactions on Networking, vol.13, no.2, pp. 425-436, 2005
2005	J.-Y. Le Boudec, M. Vojnovic	Perfect Simulation and Stationarity of a Class of Mobility Models	IEEE INFOCOM, 2005
2005	C. Tudec, T. Gross	A Mobility Model Based on WLAN Traces and its Validation	IEEE INFOCOM, 2005
2006	A. Tchamkerten, E. Telatar	Variable Length Coding over an Unknown Channel	IEEE Transactions on Information Theory, vol. 52, no 5, pp. 2126-2145, 2006
2007	A. Ozgur, O. Leveque, D. Tse	Hierarchical Cooperation Achieves Linear Capacity Scaling in Ad Hoc Networks	IEEE INFOCOM, 2007
2007	M. Franceschetti, O. Dousse, D. N. C. Tse, P. Thiran	Closing the Gap in the Capacity of Wireless Networks Via Percolation Theory	IEEE Transactions on Information Theory, vol. 53, no. 3, pp. 1009-1018, 2007
2007	N. Burri, P. von Rickenbach, R. Wattenhofer	Dozer: Ultra-Low Power Data Gathering in Sensor Networks	6th International Conference on Information Processing in Sensor Networks (IPSN), 2007
2007	K. Aberer, M. Hauswirth, A. Salehi	Infrastructure for data processing in large-scale interconnected sensor networks	IEEE International Conference on Mobile Data Management (MDM), 2007
2008	G. Barrenetxea, F. Ingelrest, G. Schaefer, M. Vetterli	The Hitchhiker's Guide to Successful Wireless Sensor Network Deployments	ACM Conference on Embedded Networked Sensor Systems (SenSys), 2008
2009	R. Achanta, S. Hemami, F. Estrada, S. Süsstrunk	Frequency-tuned Salient Region Detection	IEEE International Conference on Computer Vision and Pattern Recognition (CVPR), 2009
2009	J. Beutel, S. Gruber, A. Hasler, R. Lim, A. Meier, C. Plessl, I. Talzi, L. Thiele, C. Tschudin, M. Woehrle, M. Yuecel	PermaDAQ: A scientific instrument for precision sensing and data recovery in environmental extremes	International Conference on Information Processing in Sensor Networks (IPSN), 2009

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2009	S. B. Korada, Satish, E. Sasoglu, R. Urbanke	Polar Codes: Characterization of Exponent, Bounds, and Constructions	IEEE Transactions on Information Theory, vol. 56, Issue 12, 2009
2009	J. Colli-Vignarelli, J. Vernez, R. Merz, C. Dehollain, S. Robert, J.-Y. Le Boudec	Concurrent Transmissions in IR-UWB Networks : an Experimental Validation	IEEE International Conference on Ultra-Wideband (ICUWB), 2009
2010	I. Botan, R. Derakhshan, N. Dindar, L. Haas, R. J. Miller, N. Tatbul	SECRET: A Model for Analysis of the Execution Semantics of Stream Processing Systems	International Conference on Very Large Data Bases (VLDB), 2010
2010	S. Knellwolf, W. Meier, M. Naya-Plasencia	Conditional Differential Cryptanalysis of NLFSR-Based Cryptosystems	16th Annual International Conference on the Theory and Application of Cryptology and Information Security (ASIACRYPT), 2010
2011	F. Ferrari, M. Zimmerling, L. Thiele, O. Saukh	Network Flooding and Time Synchronization with Glossy	International Conference on Information Processing in Sensor Networks (IPSN), 2011
2011	H. Dubois-Ferrière, M. Grossglauser, M. Vetterli	Valuable Detours: Least-Cost Anypath Routing	IEEE/ACM Trans. on Networking, vol 19, no 2, 2011
2011	A. Prorok, P. Tomé, A. Martinoli	Accommodation of NLOS for Ultra-Wideband TDOA Localization in Single- and Multi-Robot Systems	International Conference on Indoor Positioning and Indoor Navigation, 2011
2011	S. Simoni, S. Padoan, D. F. Nadeau, M. Diebold, A. Porporato, G. Barrenetxea, F. Ingelrest, M. Vetterli, M. B. Parlange	Hydrologic response of an alpine watershed: Application of a meteorological wireless sensor network to understand streamflow generation	Water Resources Research, vol. 47, W10524, 2011
2011	D. Basin, S. Capkun, P. Schaller, B. Schmidt	Formal Reasoning about Physical Properties of Security Protocols	ACM Transactions on Information and System Security, 2011
2012	C. Strecha, A. M. Bronstein, M.M. Bronstein, P. Fua	LDAHash: Improved matching with smaller descriptors	IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 34, nr. 1, 2012