Xavier Dfago

List of Publications by Year in Descending Order

67 papers	1,157 citations	15 h-index	32 g-index
88 ext. papers	1,453 ext. citations	1.7 avg, IF	4.2 L-index

#	Paper	IF	Citations
67	Resilient Real-Valued Consensus in Spite of Mobile Malicious Agents on Directed Graphs. *IEEE Transactions on Parallel and Distributed Systems*, **2022**, 33, 586-603	3.7	1
66	Resilient Consensus against Mobile Malicious Agents. *IFAC-PapersOnLine*, **2020**, 53, 3409-3414	0.7	0
65	Self-stabilizing gathering of mobile robots under crash or Byzantine faults. *Distributed Computing*, **2020**, 33, 393-421	1.2	5
64	Fault-Tolerant Mobile Robots. *Lecture Notes in Computer Science*, **2019**, 234-251	0.9	3
63	Priority Inheritance with Backtracking for Iterative Multi-agent Path Finding **2019**,		10
62	Approximate QoS Rule Derivation Based on Root Cause Analysis for Cloud Computing **2019**,		3
61	Optimally Gathering Two Robots **2018**,		15
60	Flocking with Oblivious Robots. *Lecture Notes in Computer Science*, **2016**, 94-108	0.9	3
59	Tight bound on mobile Byzantine Agreement. *Theoretical Computer Science*, **2016**, 609, 361-373	1.1	8
58	Reliability prediction for component-based software systems: Dealing with concurrent and propagating errors. *Science of Computer Programming*, **2015**, 97, 426-457	1.1	15
57	Communicating Reliably in Multihop Dynamic Networks Despite Byzantine Failures **2015**,		7
56	Discovering and Assessing Fine-Grained Metrics in Robot Networks Protocols **2014**,		18
55	Tight Bound on Mobile Byzantine Agreement. *Lecture Notes in Computer Science*, **2014**, 76-90	0.9	5
54	**2013**,		3
53	Reliability Prediction for Component-Based Software Systems with Architectural-Level Fault Tolerance Mechanisms **2013**,		6
52	The Gathering Problem for Two Oblivious Robots with Unreliable Compasses. *SIAM Journal on Computing*, **2012**, 41, 26-46	1.1	59
51	Reliability Prediction for Component-Based Systems: Incorporating Error Propagation Analysis and Different Execution Models **2012**,		8

50	Brief Announcement: Discovering and Assessing Fine-Grained Metrics in Robot Networks Protocols. *Lecture Notes in Computer Science*, **2012**, 282-284	0.9	5
49	Exploration and Surveillance in Multi-robots Networks **2011**,		2
48	Fault-tolerant flocking for a group of autonomous mobile robots. *Journal of Systems and Software*, **2011**, 84, 29-36	3.3	33
47	The cost of probabilistic agreement in oblivious robot networks. *Information Processing Letters*, **2010**, 110, 431-438	0.8	15
46	Self-stabilized Flocking of a Group of Mobile Robots under Memory Corruption **2009**,		1
45	Using eventually consistent compasses to gather memory-less mobile robots with limited visibility. *ACM Transactions on Autonomous and Adaptive Systems*, **2009**, 4, 1-27	1.2	41
44	Fault-Tolerant Flocking of Mobile Robots with Whole Formation Rotation **2009**,		5
43	An energy efficient routing scheme for mobile wireless sensor networks **2008**,		14
42	A Decentralized and Adaptive Flocking Algorithm for Autonomous Mobile Robots **2008**,		45
41	A novel numerical algorithm based on self-tuning controller to support TCP flows. *Mathematics and Computers in Simulation*, **2008**, 79, 1178-1188	3.3	5
40	Non-uniform circle formation algorithm for oblivious mobile robots with convergence toward uniformity. *Theoretical Computer Science*, **2008**, 396, 97-112	1.1	66
39	Fault-Tolerant Flocking in a k-Bounded Asynchronous System. *Lecture Notes in Computer Science*, **2008**, 145-163	0.9	11
38	Robust Self-Deployment for a Swarm of Autonomous Mobile Robots with Limited Visibility Range **2007**,		1
37	Real-time Task Scheduling Using Extended Overloading Technique for Multiprocessor Systems **2007**,		1
36	Collision prevention using group communication for asynchronous cooperative mobile robots. *International Conference on Advanced Networking and Applications*, **2007**,		5
35	Hybrid Overloading and Stochastic Analysis for Redundant Real-time Multiprocessor Systems **2007**,		9
34	Comparative Analysis of QoS and Memory Usage of Adaptive Failure Detectors **2007**,		3
33	Gathering Two Stateless Mobile Robots Using Very v **2007**,		5

32	Collision Prevention Platform for a Dynamic Group of Asynchronous Cooperative Mobile Robots. *Journal of Networks*, **2007**, 2,		3
31	End-to-end consensus using end-to-end channels **2006**,		1
30	Design and Analysis of a Self-Tuning Proportional and Integral Controller for Active Queue Management Routers to Support TCP Flows **2006**,		15
29	An SNMP based failure detection service. *Proceedings of the IEEE Symposium on Reliable Distributed Systems*, **2006**,		6
28	Towards a Theory of Self-organization. *Lecture Notes in Computer Science*, **2006**, 191-205	0.9	4
27	Using Eventually Consistent Compasses to Gather Oblivious Mobile Robots with Limited Visibility. *Lecture Notes in Computer Science*, **2006**, 484-500	0.9	14
26	Fault-Tolerant and Self-stabilizing Mobile Robots Gathering. *Lecture Notes in Computer Science*, **2006**, 46-60	0.9	64
25	Gathering Asynchronous Mobile Robots with Inaccurate Compasses. *Lecture Notes in Computer Science*, **2006**, 333-349	0.9	39
24	A Brief Comparative Study on Analytical Models of Computer System Dependability and Security **2005**,		3
23	A Single-Pass Online Data Mining Algorithm Combined with Control Theory with Limited Memory in Dynamic Data Streams. *Lecture Notes in Computer Science*, **2005**, 1119-1130	0.9	
22	A Resource-Based Server Performance Control for Grid Computing Systems. *Lecture Notes in Computer Science*, **2005**, 56-64	0.9	1
21	An Integrated System for Distributed Bioinformatics Environment on Grids. *Lecture Notes in Computer Science*, **2005**, 8-19	0.9	2
20	Towards a Theory of Self-organization. *Lecture Notes in Computer Science*, **2005**, 505-506	0.9	6
19	Total order broadcast and multicast algorithms. *ACM Computing Surveys*, **2004**, 36, 372-421	13.4	255
18	Semi-passive replication and Lazy Consensus. *Journal of Parallel and Distributed Computing*, **2004**, 64, 1380-1398	4.4	6
17	Decomposition of fundamental problems for cooperative autonomous mobile systems **2004**,		3
16	**2004**,		66
15	Circle formation for oblivious anonymous mobile robots with no common sense of orientation **2002** ,		62

List of Publications

14	Failure detectors as first class objects **1999**,	45
13	Optimization techniques for replicating CORBA objects **1999**,	3
12	Replicating CORBA Objects: A Marriage between Active and Passive Replication **1999**, 375-387	6
11	Highly Available Trading System: Experiments with CORBA **1998**, 91-104	0
10	Semi-passive replication	31
9	Definition and specification of accrual failure detectors	15
8	Group communication based on standard interfaces	3
7	Impact of a failure detection mechanism on the performance of consensus	13
6	Chasing the FLP impossibility result in a LAN: or, How robust can a fault tolerant server be?	5
5	Time vs. space in fault-tolerant distributed systems	3
4	Broadcasting messages in fault-tolerant distributed systems: the benefit of handling input-triggered and output-triggered suspicions differently	8
3	Contention-aware metrics for distributed algorithms: comparison of atomic broadcast algorithms	10
2	Neko: a single environment to simulate and prototype distributed algorithms	24
1	Using Model Checking to Formally Verify Rendezvous Algorithms for Robots with Lights in Euclidean Space	2