Alan Mycroft

List of Publications by Year in descending order

77 papers	1,311 citations	687220 13 h-index	477173 29 g-index
80 all docs	80 docs citations	80 times ranked	537 citing authors

#	Article	IF	Citations
1	A polymorphic type system for prolog. Artificial Intelligence, 1984, 23, 295-307.	3.9	204
2	Kilim: Isolation-Typed Actors for Java. Lecture Notes in Computer Science, 2008, , 104-128.	1.0	131
3	Polymorphic type schemes and recursive definitions. Lecture Notes in Computer Science, 1984, , 217-228.	1.0	104
4	The theory and practice of transforming call-by-need into call-by-value. Lecture Notes in Computer Science, 1980, , 269-281.	1.0	102
5	Data flow analysis of applicative programs using minimal function graphs. , 1986, , .		84
6	Rendezvous: A search engine for binary code. , 2013, , .		56
7	A lightweight in-place implementation for software thread-level speculation. , 2009, , .		45
8	Coeffects. , 2014, , .		42
9	A relational framework for abstract interpretation. Lecture Notes in Computer Science, 1986, , 156-171.	1.0	34
10	Redux. Electronic Notes in Theoretical Computer Science, 2003, 89, 149-170.	0.9	33
11	Coeffects: Unified Static Analysis of Context-Dependence. Lecture Notes in Computer Science, 2013, , 385-397.	1.0	32
12	Source-code queries with graph databasesâ€"with application to programming language usage and evolution. Science of Computer Programming, 2015, 97, 127-134.	1.5	27
13	Task Partitioning for Multi-core Network Processors. Lecture Notes in Computer Science, 2005, , 76-90.	1.0	24
14	Software thread-level speculation. , 2008, , .		24
15	Type-Based Decompilation (or Program Reconstruction via Type Reconstruction). Lecture Notes in Computer Science, 1999, , 208-223.	1.0	23
16	Linear Types for Packet Processing. Lecture Notes in Computer Science, 2004, , 204-218.	1.0	23
17	Polymorphism, subtyping, and type inference in MLsub. , 2017, , .		22
18	Ypnos. , 2010, , .		20

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19	Completeness and predicate-based abstract interpretation. , 1993, , .		16
20	Logic programs and many-valued logic. Lecture Notes in Computer Science, 1984, , 274-286.	1.0	16
21	An Efficient and Scalable Platform for Java Source Code Analysis Using Overlaid Graph Representations. IEEE Access, 2020, 8, 72239-72260.	2.6	15
22	A new approach to parallelising tracing algorithms. , 2009, , .		15
23	Effect Systems Revisitedâ€"Control-Flow Algebra and Semantics. Lecture Notes in Computer Science, 2016, , 1-32.	1.0	14
24	Limits of parallelism using dynamic dependency graphs. , 2009, , .		13
25	Set-Congruence Dynamic Analysis for Thread-Level Speculation (TLS). Lecture Notes in Computer Science, 2008, , 156-171.	1.0	13
26	Liveness-Based Pointer Analysis. Lecture Notes in Computer Science, 2012, , 265-282.	1.0	10
27	Coeffects. ACM SIGPLAN Notices, 2014, 49, 123-135.	0.2	10
28	Estimating and Exploiting Potential Parallelism by Source-Level Dependence Profiling. Lecture Notes in Computer Science, 2010, , 26-37.	1.0	10
29	Higher-level techniques for hardware description and synthesis. International Journal on Software Tools for Technology Transfer, 2003, 4, 271-297.	1.7	9
30	SCAFOS: linking sensor data to contextâ€aware applications using abstract events. International Journal of Pervasive Computing and Communications, 2008, 3, 347-377.	1.1	9
31	The cache behaviour of large lazy functional programs on stock hardware. , 2002, , .		9
32	Programming language evolution via source code query languages. , 2012, , .		8
33	The Next 7000 Programming Languages. Lecture Notes in Computer Science, 2019, , 250-282.	1.0	8
34	Uniform ideals and strictness analysis. Lecture Notes in Computer Science, 1991, , 47-59.	1.0	7
35	Bidirectional data flow analysis for type inferencing. Computer Languages, Systems and Structures, 2003, 29, 15-44.	1.4	6
36	Controlling Control Flow in Web Applications. Electronic Notes in Theoretical Computer Science, 2008, 200, 119-131.	0.9	6

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37	Efficient and Correct Stencil Computation via Pattern Matching and Static Typing. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 66, 68-92.	0.8	6
38	Delayed Side-Effects Ease Multi-core Programming. Lecture Notes in Computer Science, 2007, , 641-650.	1.0	6
39	Programming Language Design and Analysis Motivated by Hardware Evolution. Lecture Notes in Computer Science, 2007, , 18-33.	1.0	6
40	Jones optimality and hardware virtualization. , 2008, , .		5
41	Extending monads with pattern matching. , 2011, , .		5
42	LINKING TEMPORAL FIRST ORDER LOGIC AND HIDDEN MARKOV MODELS WITH ABSTRACT EVENTS. International Journal on Artificial Intelligence Tools, 2010, 19, 857-893.	0.7	4
43	Extended Call-by-Push-Value: Reasoning About Effectful Programs and Evaluation Order. Lecture Notes in Computer Science, 2019, , 235-262.	1.0	4
44	Notions of Aliasing and Ownership. Lecture Notes in Computer Science, 2013, , 59-83.	1.0	4
45	Uniform PERs and comportment analysis. Lecture Notes in Computer Science, 1995, , 169-187.	1.0	3
46	Abstract interpretation of combinational asynchronous circuits. Science of Computer Programming, 2007, 64, 166-183.	1.5	3
47	Programming language evolution workshop report. , 2014, , .		3
48	Refactoring traces to identify concurrency improvements. , 2021, , .		3
49	Haskell Is Not Not ML. Lecture Notes in Computer Science, 2006, , 38-53.	1.0	3
50	Control Flow Analysis for the Join Calculus. Lecture Notes in Computer Science, 2012, , 181-197.	1.0	3
51	Flow- and Context-Sensitive Points-To Analysis Using Generalized Points-To Graphs. Lecture Notes in Computer Science, 2016, , 212-236.	1.0	3
52	Schedulability Analysis Abstractions for Safety Critical Java. , 2012, , .		2
53	Call-by-need effects via coeffects. Open Computer Science, 2018, 8, 93-108.	1.3	2
54	Source code patches from dynamic analysis. , 2021, , .		2

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55	Liveness-Based Garbage Collection. Lecture Notes in Computer Science, 2014, , 85-106.	1.0	2
56	Bit-level partial evaluation of synchronous circuits. , 2006, , .		2
57	Isolation Types and Multi-core Architectures. Lecture Notes in Computer Science, 2012, , 33-48.	1.0	2
58	A Notation for Comonads. Lecture Notes in Computer Science, 2013, , 1-17.	1.0	2
59	Untyped strictness analysis. Journal of Functional Programming, 1995, 5, 37-49.	0.5	1
60	Linking temporal first-order logic with Bayesian networks for the simulation of pervasive computing systems. Simulation Modelling Practice and Theory, 2011, 19, 161-180.	2.2	1
61	Critical-Path-Guided Interactive Parallelisation. , 2011, , .		1
62	Extending monads with pattern matching. ACM SIGPLAN Notices, 2012, 46, 1-12.	0.2	1
63	A Unified Model for Context-Sensitive Program Analyses:. ACM Computing Surveys, 2022, 54, 1-37.	16.1	1
64	Language-Based Optimisation of Sensor-Driven Distributed Computing Applications. , 2008, , 407-422.		1
65	Generalized Points-to Graphs. ACM Transactions on Programming Languages and Systems, 2020, 42, 1-78.	1.7	1
66	Petri-nets as an Intermediate Representation for Heterogeneous Architectures. Lecture Notes in Computer Science, 2011, , 226-237.	1.0	1
67	Revisiting SIMD Programming. Lecture Notes in Computer Science, 2007, , 32-46.	1.0	1
68	Object-Oriented Type Systems. Computer Journal, 1995, 38, 79-80.	1.5	0
69	Applying Bayesian Networks to Sensor-Driven Systems. Proceedings International Symposium on Wearable Computers, 2006, , .	0.0	0
70	Choosing Method of the Most Effective Nested Loop Shearing for Parallelism. , 2007, , .		0
71	It's Only Illegal If You Get Caught. , 2014, , .		0
72	REPAIR: Hard-error recovery via re-execution. , 2015, , .		0

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73	Formally Efficient Program Instrumentation. Lecture Notes in Computer Science, 2010, , 245-252.	1.0	0
74	Strictness Meets Data Flow. Lecture Notes in Computer Science, 2010, , 439-454.	1.0	0
75	Aliasing Visions: Ownership and Location. Lecture Notes in Computer Science, 2013, , 503-504.	1.0	0
76	Concise Analysis Using Implication Algebras for Task-Local Memory Optimisation. Lecture Notes in Computer Science, 2013, , 433-453.	1.0	0
77	Mapping the Join Calculus to Heterogeneous Hardware. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 109, 7-12.	0.8	0