Haibing Guan

List of Publications by Year in Descending Order

177 papers	2,078 citations	22 h-index	39 g-index
213 ext. papers	2,700 ext. citations	3.1 avg, IF	5.06 L-index

#	Paper	IF	Citations
177	SWVM: a light-weighted virtualization platform based on Sunway CPU architecture. *Science China Information Sciences*, **2022**, 65, 1	3.4	
176	GiantVM: A Novel Distributed Hypervisor for Resource Aggregation with DSM-aware Optimizations. *Transactions on Architecture and Code Optimization*, **2022**, 19, 1-27	1.3	1
175	QKPT: Securing Your Private Keys in Cloud with Performance, Scalability and Transparency. *IEEE Transactions on Dependable and Secure Computing*, **2021**, 1-1	3.9	
174	Efficient shuffle management for DAG computing frameworks based on the FRQ model. *Journal of Parallel and Distributed Computing*, **2021**, 149, 163-173	4.4	0
173	gRemote: Cloud rendering on GPU resource pool based on API-forwarding. *Journal of Systems Architecture*, **2021**, 116, 102055	5.5	1
172	Enabling Cloud Applications to Negotiate Multiple Resources in a Cost-Efficient Manner. *IEEE Transactions on Services Computing*, **2021**, 14, 413-425	4.8	
171	A comprehensive test framework for cryptographic accelerators in the cloud. *Journal of Systems Architecture*, **2021**, 113, 101873	5.5	0
170	STYX: A Hierarchical Key Management System for Elastic Content Delivery Networks on Public Clouds. *IEEE Transactions on Dependable and Secure Computing*, **2021**, 18, 843-857	3.9	2
169	COLONY: A Privileged Trusted Execution Environment with Extensibility. *IEEE Transactions on Computers*, **2021**, 1-1	2.5	1
168	SpaceDML: Enabling Distributed Machine Learning in Space Information Networks. *IEEE Network*, **2021**, 35, 82-87	11.4	
167	Balancing Power And Performance In HPC Clouds. *Computer Journal*, **2020**, 63, 880-899	1.3	
166	QWEB: High-Performance Event-Driven Web Architecture With QAT Acceleration. *IEEE Transactions on Parallel and Distributed Systems*, **2020**, 31, 2633-2649	3.7	2
165	ES2: Building an Efficient and Responsive Event Path for I/O Virtualization. *IEEE Transactions on Cloud Computing*, **2020**, 1-1	3.3	1
164	A Workflow-Aided Internet of Things Paradigm with Intelligent Edge Computing. *IEEE Network*, **2020**, 34, 92-99	11.4	6
163	A Throughput-Oriented NVMe Storage Virtualization with Workload-Aware Management. *IEEE Transactions on Computers*, **2020**, 1-1	2.5	1
162	GiantVM **2020**,		3
161	Dual Adversarial Network for Deep Active Learning. *Lecture Notes in Computer Science*, **2020**, 680-696	0.9	1

No.	Title	IF	Citations
160	MDev-NVMe: Mediated Pass-Through NVMe Virtualization Solution with Adaptive Polling. *IEEE Transactions on Computers*, **2020**, 1-1	2.5	0
159	Online traffic-aware linked VM placement in cloud data centers. *Science China Information Sciences*, **2020**, 63, 1	3.4	1
158	RESERVE: An Energy-Efficient Edge Cloud Architecture for Intelligent Multi-UAV. *IEEE Transactions on Services Computing*, **2020**, 1-1	4.8	2
157	gQoS: A QoS-Oriented GPU Virtualization with Adaptive Capacity Sharing. *IEEE Transactions on Parallel and Distributed Systems*, **2020**, 31, 843-855	3.7	3
156	gMig: Efficient vGPU Live Migration with Overlapped Software-Based Dirty Page Verification. *IEEE Transactions on Parallel and Distributed Systems*, **2020**, 31, 1209-1222	3.7	2
155	Enclavisor: A Hardware-Software Co-Design for Enclaves on Untrusted Cloud. *IEEE Transactions on Computers*, **2020**, 1-1	2.5	1
154	Heterogeneous Computational Resource Allocation for C-RAN: A Contract-Theoretic Approach. *IEEE Transactions on Services Computing*, **2020**, 1-1	4.8	5
153	A Holistic Model for Performance Prediction and Optimization on NUMA-based Virtualized Systems **2019**,		1
152	LG-RAM: Load-aware global resource affinity management for virtualized multicore systems. *Journal of Systems Architecture*, **2019**, 98, 114-125	5.5	2
151	QTLS **2019**,		4
150	PowerLyra. *ACM Transactions on Parallel Computing*, **2019**, 5, 1-39	1.4	33
149	vSimilar: A high-adaptive VM scheduler based on the CPU pool mechanism. *Journal of Systems Architecture*, **2019**, 98, 361-373	5.5	2
148	A scala based framework for developing acceleration systems with FPGAs. *Journal of Systems Architecture*, **2019**, 98, 231-242	5.5	5
147	Unsupervised Video Summarization with Attentive Conditional Generative Adversarial Networks **2019**,		15
146	EnclaveCache **2019**,		4
145	Object Guided External Memory Network for Video Object Detection **2019**,		26
144	Proactive coordination for low-congestion multi-path datacenter networks. *Journal of Systems Architecture*, **2019**, 101, 101656	5.5	1
143	Incentive Mechanism Design for Two-Layer Wireless Edge Caching Networks Using Contract Theory. *IEEE Transactions on Services Computing*, **2019**, 1-1	4.8	2

142	Design of Hybrid Wireless and Power Line Sensor Networks With Dual-Interface Relay in IoT. *IEEE Internet of Things Journal*, **2019**, 6, 239-249	10.7	30
141	When I/O Interrupt Becomes System Bottleneck: Efficiency and Scalability Enhancement for SR-IOV Network Virtualization. *IEEE Transactions on Cloud Computing*, **2019**, 7, 1183-1196	3.3	13
140	HyperCo: Optimizing Network Performance in ARM-Based Mobile Virtualization. *IEEE Transactions on Services Computing*, **2019**, 12, 131-143	4.8	
139	Fairness-Efficiency Allocation of CPU-GPU Heterogeneous Resources. *IEEE Transactions on Services Computing*, **2019**, 12, 474-488	4.8	5
138	Efficient shuffle management with SCache for DAG computing frameworks **2018**,		2
137	Demon **2018**,		2
136	Comprehensive VM Protection Against Untrusted Hypervisor Through Retrofitted AMD Memory Encryption **2018**,		4
135	Scalable GPU Virtualization with Dynamic Sharing of Graphics Memory Space. *IEEE Transactions on Parallel and Distributed Systems*, **2018**, 29, 1823-1836	3.7	10
134	gMig **2018**,		5
133	D^{2} FL: Design and Implementation of Distributed Dynamic Fault Localization. *IEEE Transactions on Dependable and Secure Computing*, **2018**, 15, 378-392	3.9	1
132	Replication-Based Fault-Tolerance for Large-Scale Graph Processing. *IEEE Transactions on Parallel and Distributed Systems*, **2018**, 29, 1621-1635	3.7	5
131	Efficient Sharing and Fine-Grained Scheduling of Virtualized GPU Resources **2018**,		4
130	On the Incentive Mechanisms for Commercial Edge Caching in 5G Wireless Networks. *IEEE Wireless Communications*, **2018**, 25, 72-78	13.4	18
129	Espresso **2018**,		17
128	gMig. *ACM SIGPLAN Notices*, **2018**, 53, 31-44	0.2	3
127	Demon. *ACM SIGPLAN Notices*, **2018**, 53, 57-70	0.2	0
126	Deep Learning based Fetal Middle Cerebral Artery Segmentation in Large-scale Ultrasound Images **2018**,		2
125	Maximizing Profit of Cloud Service Brokerage with Economic Demand Response **2018**,		5

124	Tracking-assisted Weakly Supervised Online Visual Object Segmentation in Unconstrained Videos **2018**,		5
123	The Cloud Service Broker in Multicloud Demand Response. *IEEE Cloud Computing*, **2018**, 5, 80-91		0
122	Towards Ubiquitous Intelligent Computing: Heterogeneous Distributed Deep Neural Networks. *IEEE Transactions on Big Data*, **2018**, 1-1	3.2	6
121	VButton **2018**,		10
120	HybridPass: Hybrid Scheduling for Mixed Flows in Datacenter Networks **2018**,		3
119	Qualitative Instead of Quantitative: Towards Practical Data Analysis Under Differential Privacy. *Lecture Notes in Computer Science*, **2018**, 738-751	0.9	1
118	TEES: An Efficient Search Scheme over Encrypted Data on Mobile Cloud. *IEEE Transactions on Cloud Computing*, **2017**, 5, 126-139	3.3	21
117	Accurate CPU Proportional Share and Predictable I/O Responsiveness for Virtual Machine Monitor: A Case Study in Xen. *IEEE Transactions on Cloud Computing*, **2017**, 5, 604-616	3.3	5
116	Secure Outsourcing of Virtual Appliance. *IEEE Transactions on Cloud Computing*, **2017**, 5, 390-404	3.3	2
115	ForenVisor: A Tool for Acquiring and Preserving Reliable Data in Cloud Live Forensics. *IEEE Transactions on Cloud Computing*, **2017**, 5, 443-456	3.3	22
114	**2017**,		30
113	MigVisor **2017**,		4
112	. *IEEE Transactions on Parallel and Distributed Systems*, **2017**, 28, 3486-3500	3.7	
111	Efficient and Available In-Memory KV-Store with Hybrid Erasure Coding and Replication. *ACM Transactions on Storage*, **2017**, 13, 1-30	1	16
110	A First Look at Information Entropy-Based Data Pricing **2017**,		5
109	Embedding differential privacy in decision tree algorithm with different depths. *Science China Information Sciences*, **2017**, 60, 1	3.4	6
108	Guaranteeing Deadlines for Inter-Data Center Transfers. *IEEE/ACM Transactions on Networking*, **2017**, 25, 579-595	3.8	43
107	Re2l: An efficient output-sensitive algorithm for computing Boolean operations on circular-arc polygons and its applications. *CAD Computer Aided Design*, **2017**, 83, 1-14	2.9	2

106	Intelligent Cloud Resource Management with Deep Reinforcement Learning. *IEEE Cloud Computing*, **2017**, 4, 60-69		54
105	Secure Live Migration of SGX Enclaves on Untrusted Cloud **2017**,		15
104	STYX **2017**,		8
103	Ashman: A Bandwidth Fragmentation-Based Dynamic Flow Scheduling for Data Center Networks. *Computer Journal*, **2017**, 60, 1498-1509	1.3	2
102	ES2: Aiming at an Optimal Virtual I/O Event Path **2017**,		1
101	Robust Multi-Resource Allocation with Demand Uncertainties in Cloud Scheduler **2017**,		12
100	Scala Based FPGA Design Flow (Abstract Only) **2017**,		3
99	Fast In-Memory Transaction Processing Using RDMA and HTM. *ACM Transactions on Computer Systems*, **2017**, 35, 1-37	1.1	16
98	Deconstructing Xen **2017**,		10
97	Enabling Energy Storage in Internet Datacenters: Requirements, Standards, and Opportunities. *IEEE Internet Computing*, **2016**, 20, 66-70	2.4	9
96	SMe: explicit & implicit constrained-space probabilistic threshold range queries for moving objects. *GeoInformatica*, **2016**, 20, 19-58	2.5	6
95	A Case for Virtualizing Persistent Memory **2016**,		4
94	Fast Consensus Using Bounded Staleness for Scalable Read-Mostly Synchronization. *IEEE Transactions on Parallel and Distributed Systems*, **2016**, 27, 3485-3500	3.7	1
93	A user mode CPU‐GPU scheduling framework for hybrid workloads. *Future Generation Computer Systems*, **2016**, 63, 25-36	7.5	5
92	EnDAS: Efficient Encrypted Data Search as a Mobile Cloud Service. *IEEE Transactions on Emerging Topics in Computing*, **2015**, 3, 372-383	4.1	10
91	Guaranteeing deadlines for inter-datacenter transfers **2015**,		25
90	Differential privacy in telco big data platform. *Proceedings of the VLDB Endowment*, **2015**, 8, 1692-1703	3.1	34
89	Reducing world switches in virtualized environment with flexible cross-world calls **2015**,		11

88	FLOWPROPHET: Generic and Accurate Traffic Prediction for Data-Parallel Cluster Computing **2015**,		13
87	SYNC or ASYNC: time to fuse for distributed graph-parallel computation **2015**,		50
86	A survey on data center networking for cloud computing. *Computer Networks*, **2015**, 91, 528-547	5.4	66
85	Energy-Efficient SLA Guarantees for Virtualized GPU in Cloud Gaming. *IEEE Transactions on Parallel and Distributed Systems*, **2015**, 26, 2434-2443	3.7	16
84	A Virtualization Based Monitoring System for Mini-intrusive Live Forensics. *International Journal of Parallel Programming*, **2015**, 43, 455-471	1.5	6
83	Adaptive Power Management through Thermal Aware Workload Balancing in Internet Data Centers. *IEEE Transactions on Parallel and Distributed Systems*, **2015**, 26, 2400-2409	3.7	21
82	COMIC: Cost Optimization for Internet Content Multihoming. *IEEE Transactions on Parallel and Distributed Systems*, **2015**, 26, 1851-1860	3.7	12
81	Distributed Optimal Datacenter Bandwidth Allocation for Dynamic Adaptive Video Streaming **2015**,		7
80	vINT: Hardware-Assisted Virtual Interrupt Remapping for SMP VM with Scheduling Awareness **2015**,		1
79	WaSCO: A Hybrid Enterprise Desktop Wake-Up System Based on Cloud Infrastructure. *IEEE Access*, **2015**, 3, 2000-2013	3.5	
78	Comprehensive understanding of operation cost reduction using energy storage for IDCs **2015**,		11
77	. *IEEE Micro*, **2015**, 35, 34-43	1.8	5
76	Control of Large-Scale Systems through Dimension Reduction. *IEEE Transactions on Services Computing*, **2015**, 8, 563-575	4.8	5
75	DaSS: Dynamic Time Slice Scheduler for Virtual Machine Monitor. *Lecture Notes in Computer Science*, **2015**, 77-90	0.9	1
74	. *IEEE/ACM Transactions on Networking*, **2014**, 22, 1218-1231	3.8	14
73	Multi-Granularity Memory Mirroring via Binary Translation in Cloud Environments. *IEEE Transactions on Network and Service Management*, **2014**, 11, 36-45	4.8	1
72	Service level agreement based energy-efficient resource management in cloud data centers. *Computers and Electrical Engineering*, **2014**, 40, 1621-1633	4.3	44
71	Energy-Efficient Identification in Large-Scale RFID Systems with Handheld Reader. *IEEE Transactions on Parallel and Distributed Systems*, **2014**, 25, 1211-1222	3.7	14

70	Concurrent and consistent virtual machine introspection with hardware transactional memory **2014**,		28
69	On pricing schemes in data center network with game theoretic approach **2014**,		2
68	HYVI: A HYbrid VIrtualization Solution Balancing Performance and Manageability. *IEEE Transactions on Parallel and Distributed Systems*, **2014**, 25, 2332-2341	3.7	14
67	Workload-Aware Credit Scheduler for Improving Network I/O Performance in Virtualization Environment. *IEEE Transactions on Cloud Computing*, **2014**, 2, 130-142	3.3	22
66	vGASA: Adaptive Scheduling Algorithm of Virtualized GPU Resource in Cloud Gaming. *IEEE Transactions on Parallel and Distributed Systems*, **2014**, 25, 3036-3045	3.7	31
65	Two-phase execution of binary applications on CPU/GPU machines. *Computers and Electrical Engineering*, **2014**, 40, 1567-1579	4.3	3
64	Fuzzy c-means with wavelet filtration for MR image segmentation **2014**,		7
63	VGRIS: Virtualized GPU Resource Isolation and Scheduling in Cloud Gaming. *Transactions on Architecture and Code Optimization*, **2014**, 11, 1-25	1.3	32
62	LAWS **2014**,		20
61	Replication-Based Fault-Tolerance for Large-Scale Graph Processing **2014**,		34
60	A refined decompiler to generate C code with high readability. *Software - Practice and Experience*, **2013**, 43, 1337-1358	2.5	4
59	Cache isolation for virtualization of mixed general-purpose and real-time systems. *Journal of Systems Architecture*, **2013**, 59, 1405-1413	5.5	4
58	SRIDesk: A Streaming based Remote Interactivity architecture for desktop virtualization system **2013**,		2
57	. *IEEE Transactions on Parallel and Distributed Systems*, **2013**, 24, 1118-1128	3.7	7
56	Quality of service aware power management for virtualized data centers. *Journal of Systems Architecture*, **2013**, 59, 245-259	5.5	30
55	A multi-objective ant colony system algorithm for virtual machine placement in cloud computing. *Journal of Computer and System Sciences*, **2013**, 79, 1230-1242	1	419
54	An Automation-Assisted Empirical Study on Lock Usage for Concurrent Programs **2013**,		4
53	SR-IOV Based Network Interrupt-Free Virtualization with Event Based Polling. *IEEE Journal on Selected Areas in Communications*, **2013**, 31, 2596-2609	14.2	7

52	Fuzzy Clustering with Multi-Resolution Bilateral Filtering for Medical Image Segmentation. *International Journal of Fuzzy System Applications*, **2013**, 3, 47-59	0.6	3
51	VGRIS **2013**,		23
50	HYBit: A Hybrid Taint Analyzing Framework for Binary Programs. *Lecture Notes in Computer Science*, **2013**, 232-239	0.9	2
49	Memvisor: Application Level Memory Mirroring via Binary Translation **2012**,		2
48	Adaptive and Scalable Optimizations for High Performance SR-IOV **2012**,		20
47	SINOF: A dynamic-static combined framework for dynamic binary translation. *Journal of Systems Architecture*, **2012**, 58, 305-317	5.5	5
46	High performance network virtualization with SR-IOV. *Journal of Parallel and Distributed Computing*, **2012**, 72, 1471-1480	4.4	96
45	Vis: Virtualization enhanced live forensics acquisition for native system. *Digital Investigation*, **2012**, 9, 22-33	3.3	10
44	Optimizing virtual machines using hybrid virtualization. *Journal of Systems and Software*, **2012**, 85, 2593-2603	3.3	11
43	A Improved Clustering Analysis Method Based on Fuzzy C-Means Algorithm by Adding PSO Algorithm. *Lecture Notes in Computer Science*, **2012**, 231-242	0.9	2
42	Static program analysis assisted dynamic taint tracking for software vulnerability discovery. *Computers and Mathematics With Applications*, **2012**, 63, 469-480	2.7	17
41	sEBP: Event Based Polling for Efficient I/O Virtualization **2012**,		1
40	Adjustable Credit Scheduling for High Performance Network Virtualization **2012**,		6
39	Performance Enhancement and Optimized Analysis of the Worst Case End-to-End Delay for AFDX Networks **2012**,		3
38	Fuzzy C-means Clustering with Bilateral Filtering for Medical Image Segmentation. *Lecture Notes in Computer Science*, **2012**, 221-230	0.9	6
37	Frontier-based multi-robot map exploration using Particle Swarm Optimization **2011**,		23
36	An algorithm for self-organized aggregation of swarm robotics using timer **2011**,		5
35	A PSO-inspired multi-robot search algorithm independent of global information **2011**,		15

34	Debugging classification and anti-debugging strategies **2011**,		3
33	Vis **2011**,		5
32	MTCrossBit: A dynamic binary translation system based on multithreaded optimization. *Science China Information Sciences*, **2011**, 54, 2064-2078		3.4
31	Enhanced Slotted Aloha Protocols for Underwater Sensor Networks with Large Propagation Delay **2011**,		19
30	A Translation Framework for Executing the Sequential Binary Code on CPU/GPU Based Architectures. *Journal of Software*, **2011**, 6,	3	1
29	Text Localization and Recognition in Complex Scenes Using Local Features. *Lecture Notes in Computer Science*, **2011**, 121-132	0.9	5
28	Flexible Endian Adjustment for Cross Architecture Binary Translation. *Communications in Computer and Information Science*, **2011**, 155-162	0.3	
27	Code cache management based on working set in dynamic binary translator. *Computer Science and Information Systems*, **2011**, 8, 653-671	0.8	0
26	A Refined Decompiler to Generate C Code with High Readability **2010**,		4
25	A swarm intelligence based algorithm for distribute search and collective cleanup **2010**,		1
24	A Multi-robot Pattern Formation Algorithm Based on Distributed Swarm Intelligence **2010**,		4
23	A multi-robot self-deployment method based on Particle Swarm Optimization **2010**,		2
22	Real-time Enhancement for Xen Hypervisor **2010**,		11
21	High performance network virtualization with SR-IOV **2010**,		53
20	Performance Tuning Towards a KVM-Based Low Latency Virtualization System **2010**,		6
19	CoDBT: A multi-source dynamic binary translator using hardware-software collaborative techniques. *Journal of Systems Architecture*, **2010**, 56, 500-508	5.5	6
18	A Novel System for Robust Text Location and Recognition of Book Covers. *Lecture Notes in Computer Science*, **2010**, 608-617	0.9	
17	Two-View Motion Segmentation by Gaussian Blurring Mean Shift with Fitness Measure **2009**,		1

List of Publications

16	SSIFT: An Improved SIFT Descriptor for Chinese Character Recognition in Complex Images **2009**,		4
15	A Hybrid Model Checking and Runtime Monitoring Method for C++ Web Services **2009**,		2
14	**2009**,		9
13	Towards high-quality I/O virtualization **2009**,		31
12	Performance Comparison of Register Allocation Algorithms in Dynamic Binary Translation **2009**,		1
11	An Improved Descriptor for Chinese Character Recognition **2009**,		4
10	A statistical-feature-based approach to internet traffic classification using Machine Learning **2009**,		1
9	A Distributed Bidirectional Auction Algorithm for Multirobot Coordination **2009**,		10
8	FiLM: A Runtime Monitoring Tool for Distributed Systems **2009**,		3
7	FLTL-MC: Online High Level Program Analysis for Web Services **2009**,		2
6	Behavior-Based Proactive Detection of Unknown Malicious Codes **2009**,		4
5	The Implementation of Static-Integrated Optimization Framework for Dynamic Binary Translation **2009**,		1
4	MTCrossBit: A Dynamic Binary Translation System Using Multithreaded Optimization Framework. *Lecture Notes in Computer Science*, **2009**, 502-512	0.9	2
3	Multithreaded Optimizing Technique for Dynamic Binary Translator CrossBit **2008**,		1
2	An intermediate language level optimization framework for dynamic binary translation. *ACM SIGPLAN Notices*, **2007**, 42, 3-9	0.2	9
1	Model-Aided Metadata Management for Wireless Sensor Networks. *Lecture Notes in Computer Science*, **2006**, 259-268	0.9	1