

Liam McDaid

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2968235/publications.pdf>

Version: 2024-02-01

24
papers

262
citations

1307594

7
h-index

1058476

14
g-index

25
all docs

25
docs citations

25
times ranked

205
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Advancing interconnect density for spiking neural network hardware implementations using traffic-aware adaptive network-on-chip routers. <i>Neural Networks</i> , 2012, 33, 42-57. | 5.9 | 54 |
| 2 | A Reconfigurable and Biologically Inspired Paradigm for Computation Using Network-On-Chip and Spiking Neural Networks. <i>International Journal of Reconfigurable Computing</i> , 2009, 2009, 1-13. | 0.2 | 46 |
| 3 | Hardware spiking neural network prototyping and application. <i>Genetic Programming and Evolvable Machines</i> , 2011, 12, 257-280. | 2.2 | 41 |
| 4 | Fixed latency on-chip interconnect for hardware spiking neural network architectures. <i>Parallel Computing</i> , 2013, 39, 357-371. | 2.1 | 25 |
| 5 | Case Studyâ€™Spiking Neural Network Hardware System for Structural Health Monitoring. <i>Sensors</i> , 2020, 20, 5126. | 3.8 | 15 |
| 6 | Low Cost Interconnected Architecture for the Hardware Spiking Neural Networks. <i>Frontiers in Neuroscience</i> , 2018, 12, 857. | 2.8 | 11 |
| 7 | EMBRACE-SysC for analysis of NoC-based Spiking Neural Network architectures. , 2010, , . | | 8 |
| 8 | Exploring Spiking Neural Networks for Prediction of Traffic Congestion in Networks-on-Chip. , 2020, , . | | 8 |
| 9 | FPGA-based Fault-injection and Data Acquisition of Self-repairing Spiking Neural Network Hardware. , 2018, , . | | 7 |
| 10 | Adaptive Routing Strategies for Large Scale Spiking Neural Network Hardware Implementations. <i>Lecture Notes in Computer Science</i> , 2011, , 77-84. | 1.3 | 7 |
| 11 | Layered tile architecture for efficient hardware spiking neural networks. <i>Microprocessors and Microsystems</i> , 2017, 53, 21-32. | 2.8 | 6 |
| 12 | Time-multiplexed System-on-Chip using Fault-tolerant Astrocyte-Neuron Networks. , 2018, , . | | 6 |
| 13 | GABA Regulation of Burst Firing in Hippocampal Astrocyte Neural Circuit: A Biophysical Model. <i>Frontiers in Cellular Neuroscience</i> , 2019, 13, 335. | 3.7 | 6 |
| 14 | AstroByte: Multi-FPGA Architecture for Accelerated Simulations of Spiking Astrocyte Neural Networks. , 2020, , . | | 4 |
| 15 | Predicting Networks-on-Chip traffic congestion with Spiking Neural Networks. <i>Journal of Parallel and Distributed Computing</i> , 2021, 154, 82-93. | 4.1 | 4 |
| 16 | Computing with Biologically Inspired Neural Oscillators: Application to Colour Image Segmentation. <i>Advances in Artificial Intelligence</i> , 2010, 2010, 1-21. | 0.9 | 2 |
| 17 | Rapid application prototyping for hardware modular spiking neural network architectures. <i>Neural Computing and Applications</i> , 2017, 28, 2767-2779. | 5.6 | 1 |
| 18 | Bio-inspired Anomaly Detection for Low-cost Gas Sensors. , 2018, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Minimising Impact of Local Congestion in Networks-on-Chip Performance by Predicting Buffer Utilisation. , 2020, , . | | 1 |
| 20 | Mathematical modelling of human P2X-mediated plasma membrane electrophysiology and calcium dynamics in microglia. PLoS Computational Biology, 2021, 17, e1009520. | 3.2 | 1 |
| 21 | Scalable Bio-inspired Fault Detection, Isolation and Recovery in NoCs. , 2018, , . | | 0 |
| 22 | Computational Study of Astroglial Calcium Homeostasis in a Semi-isolated Synaptic Cleft. , 2020, , . | | 0 |
| 23 | Investigating Power Reduction for NoC-Based Spiking Neural Network Platforms using Channel Encoding. International Journal of Adaptive Resilient and Autonomic Systems, 2012, 3, 1-16. | 0.3 | 0 |
| 24 | Spiking Neural Network-based Structural Health Monitoring Hardware System. , 2021, , . | | 0 |