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2. Lei Yang, Weiwen Jiang, Weichen Liu, Edwin Sha, Yiyu Shi, Jingtong Hu, "Co-Exploring Neural Architecture and Network-on-Chip Design for Real-Time Artificial Intelligence" in Proc. of the Asia and South Pacific Design Automation Conference (ASP-DAC), 2020
3. Qingkai Zeng, Mengxia Yu, Wenhao Yu, Jinjun Xiong, Yiyu Shi, Meng Jiang, "Faceted Hierarchy: A New Graph Type to Organize Scientific Concepts and a Construction Method", in Proc. of the Workshop on Graph-Based Natural Language Processing (TextGraphs), 2019.
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5. Tianchen Wang, Jinjun Xiong, Xiaowei Xu, Meng Jiang, Yiyu Shi, Haiyun Yuan, Meiping Huang, and Jian Zhuang, "MSU-Net: Multiscale Statistical U-Net for Real-time 3D Cardiac MRI Video Segmentation," in *Proc. of Medical Image Computing and Computer Assisted Interventions (MICCAI)*, Shenzhen, China, 2019 (acceptance rate 31%).
6. Weiwen Jiang, Edwin Sha, Xinyi Zhang, Lei Yang, Qingfeng Zhuge, Yiyu Shi and Jingtong Hu, "Achieving Super-Linear Speedup across Multi-FPGA for Real-Time DNN Inference," IEEE/ACM International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), New York, NY, 2019 (**Nominated for Best Paper Award**) (acceptance rate 29%).
7. Xiaowei Xu, Meiping Huang, Qianjun Jia, Hailong Qiu, Haiyun Yuan, Yuhao Dong, Jian Zhuang and Yiyu Shi, "Accurate Congenital Heart Disease Model Generation for 3D Printing," in *Proc. of IEEE International Workshop in Signal Processing Systems*, Nanjing, China, 2019. (**Invited Paper**)
8. Qing Lu, Weiwen Jiang, Jingtong Hu and Yiyu Shi, "On Neural Architecture Search for Resource-Constrained Hardware Platforms," in *Proc. of IEEE/ACM International Conference On Computer-Aided Design*, Westminster, CO, Nov. 2019. (**Invited Paper**)
9. Tianhao Shen, Di Gao, Yiyu Shi and Cheng Zhuo, "Power Delivery Resonant Virus: Concept and Application," in *Proc. of ACM/IEEE International Symposium on Low Power Electronics and Design*, Lausanne, Switzerland, July 2019
10. Xinyi Zhang, Weiwen Jiang, Yiyu Shi and Jingtong Hu, "When Neural Architecture Search Meets Hardware Implementation: from Hardware Awareness to Co-Design," in *Proc. of IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, Miami, FL, Aug. 2019. (**Invited Paper**)
11. Yuan Gong, Boyang Li, Christian Poellabauer and Yiyu Shi, "Real-Time Adversarial Attacks," in *Proc. of International Joint Conference on Artificial Intelligence (IJCAI)*, Macao, China, 2019 (acceptance rate 18%).
12. Boyang Li, Jie Wu and Yiyu Shi, "Privacy-Aware Cost-Effective Scheduling Considering Non-Schedulable Appliances in Smart Home," in *Proc. of IEEE International Conference on Embedded Software and Systems*, Las Vegas, NV, 2019
13. Boyang Li, Changhao Chenli, Xiaowei Xu, Taeho Jung and Yiyu Shi, "Exploiting Computation Power of Blockchain for Biomedical Image Segmentation," in *Proc. of IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*, Long Beach, CA, 2019. (**Best Student Paper Award**)
14. Zihao Liu, Xiaowei Xu, Tao Liu, QI Liu, Yanzhi Wang, Yiyu Shi, Wujie Wen, Meiping Huang, Haiyan Yuan and Jian Zhuang, "Machine Vision Guided 3D Medical Image Compression for Efficient Transmission and Accurate Segmentation in the Clouds," in *Proc. of* *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Long Beach, CA, 2019 (acceptance rate 25%).
15. Changhao Chenli, Boyang Li, Yiyu Shi and Taeho Jung, "Energy-recycling Blockchain with Proof-of-Deep-Learning," in Proc. of *International Conference on Blockchain and Cryptocurrency*, Seoul, South Korea, 2019 .
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17. Xueying Wang, Haiqiao Zhang, Qi Li, Yiyu Shi and Meng Jiang, "A Novel Unsupervised Approach for Precise Temporal Slot Filling from Incomplete and Noisy Temporal Contexts," *the Web Conference (WWW)*, San Francisco, CA, 2019 (acceptance rate 20%).
18. Yukun Ding, Jinglan Liu, Jinjun Xiong and Yiyu Shi, "On the Universal Approximability and Complexity Bounds of Quantized ReLU Neural Networks," *International Conference on Learning Representations (ICLR)*, New Orleans, LA, 2019 (acceptance rate 31%).
19. Tianchen Wang, Jinjun Xiong, XIaowei Xu and Yiyu Shi, "SCNN: A General Distribution based Statistical Convolutional Neural Network with Application to Video Object Detection," *AAAI Conference on Artificial Intelligence (AAAI)*, Honolulu, HI, 2019 (acceptance rate 16%).
20. Baixin Chen, Umamaheswara Rao Tida, Cheng Zhuo and Yiyu Shi, "Modeling and optimization of magnetic core TSV-inductor for on-chip DC-DC converter," in Proc. of *IEEE/ACM International Conference On Computer-Aided Design*, San Diego, CA, 2018 (acceptance rate 25%).
21. Yukun Ding, Jinglan Liu, Jinjun Xiong, Meng Jiang and Yiyu Shi, "Optimizing Boiler Control in Real-Time with Machine Learning for Sustainability", *ACM International Conference on Information and Knowledge Management* (CIKM'18), Turin, Italy, 2018 (acceptance rate 26%)
22. Xiaowei Xu, Qing Lu, Lin Yang, Sharon Hu, Danny Chen, Yiyu Shi, "Quantization of Fully Convolutional Networks for Accurate Biomedical Image Segmentation," in *Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), Salt lake city, Utah, 2018 (acceptance rate 29.6%)
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31. Kassan Unda, Chung-Han Chou, Shih-Chieh Chang, Cheng Zhuo and Yiyu Shi, “CN-SIM: A Cycle-Accurate Full System Power Deliver Noise Simulator,” in *Proc. of Asia and South Pacific Design Automation Conference*, Japan, 2017 (**Invited Paper**).
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34. Jie Wu, Jinglan Liu, Sharon X. Hu and Yiyu Shi, “Privacy Protection via Appliance Scheduling in Smart Homes,” in *Proc. of IEEE/ACM International Conference on Computer-Aided Design*, Austin, TX, 2016 (**Invited Paper**)
35. Jie Wu, Ulf Schlichtmann and Yiyu Shi, “On the Measurement of Power Grid Robustness Under Load Uncertainties,” in *Proc. of IEEE Smatgridcomm*, Sydney, Australia, 2016
36. Zhuo Cheng, Kassan Unda, Yiyu Shi and Wei-Kai Shih, “A Novel Cross-Layer Framework for Early-Stage Power Delivery and Architecture Co-Exploration,” in *Proc. of IEEE/ACM Design Automation Conference*, Austin, TX, 2016. (**Nominated for Best Paper Award)** (acceptance rate 22.6%)
37. Bingjun Xiao, Jinjun  Xiong,  Yiyu Shi,  "Novel applications of deep learning hidden features for adaptive testing,” in *Proc. of the Asia and South Pacific Design Automation Conference*, ASP-DAC, pp. 743-748. 2016
38. Jie Wu, Peter Feldmann, Jinjun Xiong and Yiyu Shi, “Multi-Threading Based Parallel Dynamic Simulator for Transient Behavior Analysis of Power Systems,” in *Proc. of* *IEEE SmartGridComm,* Miami, FL, 2015*.*
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40. Jinglan Liu, Da-Cheng Juan, and Yiyu Shi "Effective EDA Research in the Sea of Papers," in *Proc. of IEEE/ACM International Conference on Computer-Aided Design*, pp. 781-785, Austin, TX, 2015 (**Invited Paper**).
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49. Umamaheswara Rao Tida, Varun Mittapalli, Cheng Zhuo and Yiyu Shi, "Opportunistic Through-Silicon-Via Inductor Utilization in Resonant Clock: Concept and Algorithms," in *Proc. of International Conference on Computer-Aided Design*, pp. 750-757, San Jose, CA, 2014. (Acceptance rate 25%)
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51. Wenjian Yu, Chao Zhang, Qing Wang and Yiyu Shi, "Extraction for 3D ICs with Cylindrical Inter-Tier-Vias," in *Proc. of International Conference on Computer-Aided Design*, pp. 702-709, San Jose, CA, 2014. (Acceptance rate 25%)
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53. Jie Wu, Jinjun Xiong, Prasenjit Shil and Yiyu Shi, " Optimal PMU Placement for Identification of Multiple Power Line Outages in Smart Grids," in *Proc. of International Midwest Symposium on Circuits and Systems*, pp. 354-357, College Station, TX, 2014. (**Invited Paper**)
54. Umamaheswara Rao Tida, Varun Mittapalli, Cheng Zhuo and Yiyu Shi, " "Green" On-chip Inductors in Three-Dimensional Integrated Circuits," in Proc. of *IEEE Computer Society Annual Symposium on VLSI*, pp. 571-576, Tampa, FL, 2014. (**Invited Paper**)
55. Yuguang Chen, Tao Wang, Kuan-Yu Lai, Wen-Yu Wen, Yiyu Shi and Shih-Chieh Chang, "Critical Path Monitor Enabled Dynamic Voltage Scaling for Graceful Degradation in Sub-Threshold Designs," in *IEEE/ACM Design Automation Conference*, pp. 1-6, San Francisco, CA, 2014
56. Jie Wu, Jinjun Xiong and Yiyu Shi, "Ambiguity Group Based Location Recognition of Multiple Power Line Outages in Smart Grids," in *IEEE PES Innovative Smart Grid Technologies Conference*, 2014, Washington, DC, 2014
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58. Hui Geng, Luke Marecsa, Brian Cronquist, Zvi Or-Bach and Yiyu Shi, "Monolithic Three-Dimensional Integrated Circuits: Process and Design Implications," in *ECS Transactions, 225th Electrochemical Society Meeting*, Florida, 2014 (**Invited Paper**)
59. Yiyu Shi and Hung-Ming Chen, “Memcomputing: the Cape of Good Hope,” in *Proc. of Design, Automation & Test in Europe*, Germany, 2014 (**Invited Paper**) (Acceptance rate 23.1%)
60. Chun Zhang, Jinjun Xiong and Yiyu Shi, "Cycle Accurate Simulator for Memcomputing," in *Proc. of Design, Automation & Test in Europe*, Germany, 2014 (**Invited Paper**) (Acceptance rate 23.1%)
61. Yu-Guang Chen, Kuan-Yu Lai, Ming-Chao Lee, Yiyu Shi, Wing-Kai Hon and Shih-Chieh Chang, "Yield and Timing Constrained Spare TSV Assignment for Three-Dimensional Integrated Circuits," in *Proc. of Design, Automation & Test in Europe*, Germany, 2014 (Acceptance rate 23.1%)
62. Jie Wu, Jinjun Xiong and Yiyu Shi, "Ambiguity Group Based Location Recognition of Multiple Power Line Outages in Smart Grids," in *IEEE PES Innovative Smart Grid Technologies Conference,* Washington, DC, 2014.
63. Hao Zhu and Yiyu Shi, "Phasor Measurement Unit Placement for Identifying Power Line Outages in Wide-Area Transmission System Monitoring," in *Proc. of Hawaii International Conference on System Sciences*, pp. 2483-2492, Hawaii, 2014 (Acceptance rate ~50%)
64. Umamaheswara Rao Tida, Cheng Zhuo and Yiyu Shi, "Through-Silicon-Via Inductor: Is it Real or Just A Fantasy?" in *Proc. of Asia and South Pacific Design Automation Conference*, pp. 837-842, Singapore, 2014 (Acceptance rate 31.4%)
65. Tao Wang, Chun Zhang, Jinjun Xiong and Yiyu Shi, "Eagle-Eye: A Near-Optimal Statistical Framework for Noise Sensor Placement," in *Proc. of* *International Conference on Computer-Aided Design*, pp. 437-443, San Jose, 2013 (Acceptance rate: 26%)
66. Chun Zhang, Moongon Jung, Sung Kyu Lim and Yiyu Shi, "Novel Crack Sensor for TSV-based 3D Integrated Circuits: Design and Deployment Perspectives," in *Proc. of* *International Conference on Computer-Aided Design*, San Jose, pp. 371-378, 2013 (Acceptance rate: 26%)
67. Chung-Han Chou, Nien-Yu Tsai, Hao Yu, Yiyu Shi, Jui-Hung Chien and Shih-CHieh Chang, "On the Futility of Thermal Through-Silicon-Vias", in *Proc. of* *International Symposium on VLSI Design, Automation and Test*, 2013
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69. Pei-Wen Luo, Chun Zhang, Yung-Tai Chang, Liang-Chia Cheng, Hung-Hsie Lee, Bih-Lan Sheu, Yu-Shih Su, Ding-Ming Kwai, and Yiyu Shi, "Benchmarking for Research in Power Delivery Networks of Three-Dimensional Integrated Circuits", in *Proc. of International Symposium on Physical Design*, pp. 17-24, 2013 (Acceptance rate: 30%)
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72. Hui Geng, Jun Wu, Minsu Choi and Yiyu Shi, “Randomized Computing in Cryptography: Where is the Tofu?," in *Proc. of IEEE/ACM International Conference on Computer-aided Design*, pp. 163-167, 2012 (**Invited Paper**) (Acceptance rate: 24%)
73. Yu-Guang Chen, Yiyu Shi, Kuan-Yu Lai, Geng Hui and Shih-Chieh Chang, "Efficient Multiple-Bit Retention Register Assignment for Power Gated Design: Concept and Algorithms, " in *Proc. of IEEE/ACM International Conference on Computer-aided Design*, pp. 309-316, Nov., 2012 (Acceptance rate: 24%)
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75. Zhihao Li, Chenye Wu, Jiong Chen, Yiyu Shi, Jinjun Xiong and Amy Yuexuan Wang, "Power Distribution Network Reconfiguration for Bounded Transient Power Loss," in *Proc. of IEEE PES Innovative Smart Grid Technologies Asia*, pp. 1-5, May, 2012
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78. Tao Wang, Pei-Wen Luo, Yu-Shih Su, Liang-Chia Cheng, Ding-Ming Kwai and Yiyu Shi, "Capturing the Phantom of the Power Grid - On the Runtime Adaptive Techniques for Noise Reduction," in *Proc. of IEEE/ACM Asia and South Pacific Design Automation Conference*, pp. 640-645, Australia, Feb., 2012 (**Invited Paper**) (Acceptance rate: 34.4%)
79. Chiao-Ling Lung, Jui-Hung Chien, Yiyu Shi and Shih-Chieh Chang, "TSV Fault-tolerant Mechanisms and an Application on 3D Clock Trees," in *Proc. of International SOC Design Conference*, pp. 127-130, South Korea, Oct., 2011 (**Invited Paper**)
80. Siyu Yue, Jiong Chen, Yuantao Gu, Chenye Wu and Yiyu Shi, "Dual-Pricing Policy for Controller-Side Strategies in Demand Side Management," in *Proc. of IEEE SmartGridComm*, pp. 357-362, Belgium, Oct, 2011 (Acceptance rate: 40%)
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83. Chunchun Sui, Jun Wu, Yiyu Shi, Yong-Bin Kim and Minsu Choi, " Random Dynamic Voltage Scaling Design to Enhance Security of NCL S-Box," in *Proc. of International Midwest Symposium on Circuits and Systems*, Seoul, Korea, Aug., 2011
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88. Jason Cong, Guojie Luo and Yiyu Shi, "Thermal-aware Cell and Through-Silicon-Va Co-Placement for 3D ICs," in *Proc. of Design Automation Conference*, pp. 670-675, San Diego, Jun., 2011 (Acceptance rate: 23%)
89. Jun Wu, Yiyu Shi and Minsu Choi, "FPGA-based Measurement and Evaluation of Power Analysis Attack Resistant Asynchronous S-Box," in *Proc. of International Instrumentation and Measurement Technology Conference*, Hangzhou, China, Dec., 2011
90. Yiyu Shi and Lei He, "Modeling and Design for Beyond-the-Die Power Integrity," in *Proc. of International Conference on Computer-aided Design*, pp. 411-416, San Jose, Nov., 2010 (**Tutorial**) (Acceptance rate: 30%)
91. Bingjun Xiao, Yiyu Shi and Lei He, "A Universal State-of-Charge Algorithm for Batteries," in *Proc. of Design Automation Conference*, pp. 687-692, Anaheim, Jun., 2010 (Acceptance rate: 22%)
92. Fang Gong, Hao Yu, Yiyu Shi, Daesoo Kim, Junyan Ren and Lei He, "QuickYield: An Efficient Global-Search Based Parametric Yield Estimation with Performance Constraints," in *Proc. of Design Automation Conference,* pp. 392-397, Anaheim, Jun., 2010 (Acceptance rate: 22%)
93. Jinjun Xiong, Yiyu Shi, Vladimir Zolotov and Chandu Visweswariah, "Pre-ATPG Path Selection for Near Optimal Post-ATPG Process Space Coverage," in *Proc. of* *International Conference on Computer-aided Design,* pp. 89-96, San Jose, Nov., 2009 (Acceptance rate: 26%)
94. Wei Yao, Yiyu Shi, Lei He and Sudhakar Pamarti, "Joint Design-time and Post-silicon Optimization for Digitally Tuned Analog Circuits," in *Proc. of International Conference on Computer-aided Design*, pp. 725-730, San Jose, 2009 (Acceptance rate: 26%)
95. Yiyu Shi, Wei Yao, Lei He and Sudhakar Pamarti, "Joint Design-time and Post-silicon Optimization for Analog Circuits: A Case Study Using A High-speed Transmitter," *SRC Techcon Conference*, Austin, Jul., 2009
96. Wei Yao, Yiyu Shi and Lei He and Sudhakar Pamarti, "Worst Case Timing Jitter and Amplitude Noise in Differential Signaling," *SRC Techcon Conference*, Austin, Jul., 2009.
97. Jinjun Xiong, Yiyu Shi, Vladimir Zolotov and Chandu Visweswariah, "Statistical Multilayer Process Space Coverage for At-Speed Test," in *Proc. of Design Automation Conference*, pp. 340-345, San Francisco, Jul., 2009 (**Nominated for Best Paper Award, 7 out of 682 submissions**) (Acceptance rate: 22%)
98. Wei Yao, Yiyu Shi, Lei He and Sudhakar Pamarti, "Worst Case Timing Jitter and Amplitude Noise in Differential Signaling," in *Proc. of International Symposium on Quality Electronic Design*, pp. 40-46, San Jose, Mar., 2009 (Acceptance rate: 29%)
99. Yiyu Shi, Wei Yao, Jinjun Xiong and Lei He, "Incremental and On-demand Random Walk for Iterative Power Distribution Network Analysis," in *Proc. of Asia and South Pacific Design Automation Conference*, pp. 185-190, Feb., 2009 (Acceptance rate: 33%)
100. Yiyu Shi, Jinjun Xiong, Howard Chen and Lei He, "Clock Frequency Actuator with Efficient Stochastic Current Prediction for Runtime Resonance Noise Reduction," in *Proc. of Asia and South Pacific Design Automation Conference*, pp. 373-378, Japan, 2009 (**Nominated for Best Paper Award, 12 out of 350 submissions**) (Acceptance rate: 33%)
101. Yiyu Shi, Lei He and C.-J. Richard Shi, "Scalable Symbolic Model Order Reduction," in *Proc. of International Behavioral Modeling and Simulation Conference*, pp. 112-117, Sept., 2008.
102. Chunchen Liu, Junjie Su and Yiyu Shi, "Temperature Aware Routing Synthesis Considering Spatiotemporal Hotspot," in *Proc. of International Conference on Compute Design*, pp. 107-113, Lake Tahoe, Oct., 2008. (**Nominated for Best Paper Award**, **<6%**) (Acceptance rate: 31%)
103. Yiyu Shi, Jinjun Xiong, Chunchen Liu and Lei He, "Efficient Decoupling Capacitance Budgeting Considering Operation and Process Variations," in *Proc. of International Conference on Computer-Aided Design*, pp. 803-810, San Jose, Nov., 2007. (**Nominated for Best Paper Award, 9 out of 510 submissions**) (Acceptance rate: 27%)
104. Yiyu Shi and Lei He, "EMPIRE: An Efficient and Compact Multiple-Parameterized Model Order Reduction Method for Physical Optimization," *SRC Techcon Conference*, Texas, July, 2007.
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