Abhinav Vishnu

Curriculum Vitae

2002-2007	Fil. D., The Onto State Oniversity, Computer Science and Engineering.
1998–2002	Bachelor of Technology , <i>Institute of Technology</i> , <i>Banaras Hindu University</i> , Computer Science and Engineering.
	Work Experience
2017-Present	Principal Member of Technical Staff , ADVANCED MICRO DEVICES RESEARCH. Deep Learning on AMD Architectures
2015–2017	Research Scientist V , Pacific Northwest National Laboratory. Scalable, Fault Tolerant and Energy Efficient Programming Models for Machine Learning and Data Mining (MLDM) Algorithms
2009–2015	Research Scientist IV, PACIFIC NORTHWEST NATIONAL LABORATORY. Scalable, Fault Tolerant and Energy Efficient Programming Models for Machine Learning and Data Mining (MLDM) Algorithms
2008–2008	Software Engineer, ${\rm IBM}.$ Scalable Communication Protocols for IBM PERCS Architecture
2006–2007	IBM Ph. D. Fellow, THE OHIO STATE UNIVERSITY. High Performance MPI with Multi-Pathing on InfiniBand
2006–2006	Summer Intern, IBM . Scalable LAPI on Modern Interconnects
2005–2005	
	Research Grants
2016-2019	xGA: Global Arrays on Exascale Systems , <i>PI</i> , Exascale Computing Project. Total Award Amount: 1,600,000
2016-2017	Convergence of Deep Learning and Machine Learning for HPC Modeling and Simulation, <i>PI</i> , Total Award Amount: 450,000, DoE Advanced Scientific Computing Research.
2016-2017	Task Lead, High Performance Data Analytics Program on Two Tasks.
2016-2017	Learning Control on Building Systems , <i>PI</i> , Total Award Amount: 200,000, Laboratory Directed Research and Development.
2015-2016	Task Lead, High Performance Data Analytics Program.
2015-2016	Scalable Subsampling for Extreme Scale Machine Learning Algorithms , <i>PI</i> , Total Award Amount: 400,000, Laboratory Directed Research and Development.
2014-2015	Scalable Feature Extraction and Sampling Algorithms for Streaming Data , <i>PI</i> , Total Award Amount: 300,000, Laboratory Directed Research and Development.
2013-2014	Scalable Aggregate Remote Memory Copy Interface on Portals4, <i>PI</i> , Total Award Amount: 155,000, Intel.

Education

- 2012-2013 **Scalable Knowledge Extraction on Large Scale Systems**, *PI*, Total Award Amount: 125,000, Laboratory Directed Research and Development.
- 2009-2012 A Scalable Fault Tolerance Infrastructure and Algorithms with Programming Models and Scientific Applications, *PI*, Total Award Amount: 900,000, Laboratory Directed Research and Development.

Supercomputer Time Allocations

- 2016-2019 **xGA on Leadership Class Facilities**, *PI*, Total Award Amount: 128K SUs, Argonne Leadership Class Facility.
- 2016-2017 Scaling MaTEx on Intel KNL, PI, Total Award Amount: 40K SUs.
- 2016-2017 **Scalable Machine Learning and Data Mining on OLCF Titan**, *PI*, Total Award Amount: 1 million core hours, Oak Ridge Director's Discretionary Award.
- 2015-2016 **Scalable Machine Learning and Data Mining on Blue Gene/Q**, *PI*, Total Award Amount: 2 million core hours, Argonne Director's Discretionary Award.
- 2015-2016 **Scalable Machine Learning and Data Mining on Large Scale Systems**, *PI*, Total Award Amount: 2 million core hours, PNNL Institutional Computing (PIC) Constance.
- 2014-2016 **Scalable Global Arrays on InfiniBand**, *co-PI*, Total Award Amount: 1.6 million core hours, PNNL Cascade Supercomputer.

Awards and Accomplishments

- 2015 **Best Student Paper Finalist**, International Conference in High Performance Computing, Networking, Storage and Analysis (SC'15).
- 2015 **DOE Machine Learning Workshop**, Committee Member and Panelist Deep Learning on Big Data.
- 2014 Best Poster Finalist, International Conference in High Performance Computing, Networking, Storage and Analysis (SC'14).
- 2014 DOE Data Council, Committee Member.
- 2013 DOE Resilience Council, Committee Member.
- 2007 Best Paper Finalist, International Conference on Cluster and Grid Computing (CCgrid'07).
- 2007 **TCPP Travel Award**, International Parallel and Distributed Processing Symposium (IPDPS'07).
- 2006 Ph. D. Fellowship, IBM.
- 2006 **TCSC Travel Award**, International Conference on High Performance Computing, Networking, Storage and Analysis (SC'06).

Patents

2013 Flow Control For Reliable Message Passing , US8452888 B2, IBM.
with Tsai Yang Jea, Hung Thai, Hanhong Xue, Chulho Kim, Uman Chan and Zen Piatek

Books Edited

- ParCo'16 Programming Models and Systems Software. Special Issue of the Parallel Computing, P. Balaji, Y. Chen. and A. Vishnu, 2016.
- ParCo'15 **Energy Efficient Supercomputing. Special Issue of the Parallel Computing**, *A. Vishnu, A. Marquez, and D. Nikolopoulos*, 2015.
- JoSC'15 Programming Models and Systems Software. Special Issue of the Journal of Supercomputing, Y. Chen, P. Balaji, and A. Vishnu, 2015.

- ParCo'15 Programming Models and Systems Software. Special Issue of the Parallel Computing, P. Balaji, Y. Chen. and A. Vishnu, 2015.
- ParCo'13 Programming Models and Systems Software. Special Issue of the Parallel Computing, A. Vishnu, P. Balaji, and Y. Chen., 2013.
- JoSC'12 Programming Models and Systems Software. Special Issue of the Journal of Supercomputing, A. Vishnu, P. Balaji, and Y. Chen., 2013.
- IJHPCA'11 Programming Models and Systems Software for High End Applications. Special Issue of the Journal of Supercomputing, *P. Balaji, and A. Vishnu*, 2011.
- IJHPCA'10 Programming Models and Systems Software for High End Applications. Special Issue of the Journal of Supercomputing, *P. Balaji, and A. Vishnu*, 2010.

Publications

- RSI'18 Improving Underwater Localization Accuracy with Machine Learning, L. Rauchenstein, A. Vishnu, X. Li, and Z. Deng, Review of Scientific Instruments, 2018.
- ECML- ColdRoute: Routing Cold Questions on Stack Exchange Sites , J. Sun, A. Vishnu, C. Siegel, A. Chakrabarti, and S. Parthasarathy, European Conference on Machine Learning Principles and Practice of Knowledge Discovery, 2018.
- TACO'18 **NUMA-Aware Deep Learning Neural Networks**, *P. Roy, S. Song, S. Krishnamoorthy, A. Vishnu. D. Sengupta and X. Lio*, Transactions on Architecture and Code Optimization, 2018.
- KDD'18 Using Rule-Based Labels for Weak Supervised Learning: A ChemNet for Transferable Chemical Property Prediction, G. Goh, C. Siegel, A. Vishnu, and N. Hodas, Knowledge Discovery and Data Mining, 2018.
- HPDC'18 **Desh: Deep Learning for System Health Prediction of Lead Times to Failure in HPC**, A. Das, F. Mueller, C. Siegel and A. Vishnu, High-Performance Parallel and Distributed Computing, 2018.
- WACV'18 How much Chemistry does a Deep Neural Network Need to know to make accurate predictions?, G. Goh, C. Siegel, A. Vishnu, N. Hodas, and N. Baker, Winter Conference on Applications of Computer Vision, 2018.
 - Arxiv'18 GossipGrad: Scalable Deep Learning using Gossip Communication Based Asynchronous Gradient Descent, J. Daily, A. Vishnu, C. Siegel, T. Warfel, and V. Amatya, Arxiv 2018, 2018.
- EuroMPI'17 What does fault tolerant Deep Learning need from MPI?, V. Amatya, A. Vishnu, C. Siegel and J. Daily, EuroMPI/USA, 2017.
- ParLearning'17 Scaling Deep Learning Workloads: NVIDIA DGX-1/Pascal and Intel Knights Landing, N. Gawande, J. Landwehr, J. Daily, N. Tallent, A. Vishnu, and D. Kerbyson, International Workshop on Parallel and Distributed Computing for Large Scale Machine Learning and Big Data Analytics, 2017.
 - ICS'17 Enabling Scalability-Sensitive Speculative Parallelization for FSM Computations, *J. Qiu, Z. Zhao, B. Wu, A. Vishnu, and S. Song*, International Conference on Supercomputing, 2017.
 - IPDPS'17 **Generating Performance Models for Irregular Applications**, *R. Friese, N. Tallent, A. Vishnu, D. Kerbyson and A. Hoisie*, International Parallel and Distributed Processing Symposium, 2017.
 - JCC'17 **Deep Learning for Computational Chemistry**, *G. Goh*, *N. Hodas and*, *A. Vishnu*, Journal of Computational Chemistry, 2017.

- Arxiv'17 1 **User-transparent Distributed TensorFlow**, A. Vishnu, J. Manzano, C. Siegel and J. Daily, Arxiv, 2017.
- Arxiv'17 2 Chemception: A Deep Neural Network with Minimal Chemistry Knowledge Matches the Performance of Expert-developed QSAR/QSPR Models., G. Goh, C. Siegel, A. Vishnu, N. Hodas and N. Baker, Arxiv, 2017.
- BigData'16 Adaptive Neuron Apoptosis for Accelerating Deep Learning on Large Scale Systems, C. Siegel, A. Vishnu and J. Daily, International Conference on Big Data, 2016.
- IPDPS'16 **Fault Modeling of Extreme Scale Applications using Machine Learning**, A. Vishnu, N. Tallent, H. v. Dam, D. Kerbyson and A. Hoisie, International Parallel and Distributed Processing Symposium, 2016.
- ICPADS'16 Accelerating Deep Learning with Shrinkage and Recall, S. Zheng, A. Vishnu and C. Ding, International Conference on Parallel and Distributed Systems, 2016.
 - HiPC'16 **Fault Tolerant Frequent Pattern Mining**, *S. Abdulah*, *A. Vishnu and G. Agrawal*, International Conference on High Performance Computing, Data and Analytics, 2016.
 - ICPP'16 **Fault Tolerant Support Vector Machines**, *S. Abdulah, A. Vishnu and G. Agrawal*, International Conference on Parallel Processing, 2016.
 - SC'15 A Case for Application-Oblivious Energy-Efficient MPI Runtime, A. Venkatesh, A. Vishnu, K. Hamidouche, N. Tallent, D. Panda, D. Kerbyson and A. Hoisie, International Conference on High Performance Computing, Networking, Storage and Analysis, 2015.
- Cluster'15a Fast and Accurate Support Vector Machines on Large Scale Systems, A. Vishnu, J. Narasimhan, L. Holder, D. Kerbyson and A. Hoisie, IEEE Cluster, 2015.
- Cluster'15b Large Scale Frequent Pattern Mining using MPI One-Sided Model, A. Vishnu, and K. Agarwal, IEEE Cluster, 2015.
 - LSPP'15 On the Impact of Execution Models: A Case Study in Computational Chemistry, D. Chavarria, M. Halappanavar, S. Krishnamoorthy, A. Vishnu, and A. Hoisie, International Workshop on Large Scale Parallel Processing, IPDPS, 2015.
- PPoPP'15 **Diagnosing the Causes and Severity of One-sided Message Contention**, *N. Tallent, A. Vishnu, H. v. Dam, J. Daily, D. Kerbyson, A. Hoisie*, Principle and Practice of Parallel Programming, 2015.
- JPDC'14 A Work Stealing Based Approach for Enabling Scalable Optimal Sequence Homology Detection, J. Daily, A. Kalyanaraman, S. Krishnamoorthy, and A. Vishnu, Journal of Parallel and Distributed Computing, 2014.
- HiPC'14 On the Suitability of MPI as a PGAS Runtime, J. Daily, A. Vishnu, B. Palmer, H. v. Dam, and D. Kerbyson, International Conference on High Performance Computing, 2014.
- FGCS'14 A Performance Comparison of Current HPC systems: Blue Gene/Q, Cray XE6 and InfiniBand systems., J. Daily, D. Kerbyson, K. Barker, A. Vishnu and A. Hoisie, Future Generation Computer Science, 2013.
- JCTC'13 **A Case for Soft Error Detection and Correction in Computational Chemistry**, *H. v. Dam, A. Vishnu, and W. d. Jong*, Journal of Chemical Theory and Computation, 2013.
- Cluster'13 An overview of energy efficiency techniques in cluster computing systems, Giorgio Valentini, Walter Lassonde, Samee Ullah Khan, Nasro Min-Allah, Sajjad Ahmad Madani, Juan Li, Limin Zhang, Lizhe Wang, Nasir Ghani, Joanna Kolodziej, Hongxiang Li, Albert Y. Zomaya, Cheng-Zhong Xu, Pavan Balaji, Abhinav Vishnu, FrÃldÃlric Pinel, Johnatan E. Pecero, Dzmitry Kliazovich, Pascal Bouvry, International Journal on Cluster Computing, 2013.

- ParCo'13 A survey on resource allocation in high performance distributed computing systems, Hameed Hussain, Saif Ur Rehman Malik, Abdul Hameed, Samee Ullah Khan, Gage Bickler, Nasro Min-Allah, Muhammad Bilal Qureshi, Limin Zhang, Yongji Wang, Nasir Ghani, Joanna Kolodziej, Albert Y. Zomaya, Cheng-Zhong Xu, Pavan Balaji, Abhinav Vishnu, FrÃldÃlric Pinel, Johnatan E. Pecero, Dzmitry Kliazovich, Pascal Bouvry, Hongxiang Li, Lizhe Wang, Dan Chen, Ammar Rayes: A survey on resource allocation in high performance distributed computing systems. Parallel Computing 39(11): 709-736 (2013), Parallel Computing, 2013.
- JoSC'13 Designing Energy Efficient Communication Runtime Systems: A View from PGAS Models, A. Vishnu, S. Song, A. Marquez, K. Barker, D. Kerbyson, K. Cameron, P. Balaji, Journal of Supercomputing, 2013.
- CASS'13 **Building Scalable PGAS Communication Subsystem on Blue Gene/Q**, *A. Vishnu*, *D. Kerbyson*, *K. Barker*, *and H. v. Dam*, Communication Architecture for Scalable Systems, 2013.
- ICPADS'12 **A. Kerbyson, A. Vishnu, K. Barker, and A. Hoisie**, A. Vishnu, J. Daily and B. Palmer, International Conference on High Performance Computing, 2012.
 - HiPC'12 **Designing scalable PGAS communication subsystems on cray gemini interconnect**, *A. Vishnu, J. Daily and B. Palmer*, International Conference on High Performance Computing, 2012.
- CCGrid'12 **Global Futures: A Multi-threaded Execution Model for Global Arrays-based Applications**, *D. Chavarria*, *S. Krishnamoorthy*, and *A. Vishnu*, International Conference on Cluster, Cloud and Grid Computing, 2012.
- Computer'11 Codesign Challenges for Exascale Systems: Performance, Power, and Reliability., D. Kerbyson, A. Vishnu, K. Barker, and A. Hoisie, IEEE Computer, 2011.
 - ISC'11 Mapping communication layouts to network hardware characteristics on massivescale blue gene systems, P. Balaji, R. Gupta, A. Vishnu and P. Beckman, International Supercomputing Conference, 2011.
 - Cluster'11 **Energy Templates: Exploiting Application Information to Save Energy**, *D. Kerbyson*, *A. Vishnu*, *and K. Barker*, IEEE Cluster, 2011.
 - Hotl'11 **Evaluating the Potential of Cray Gemini Interconnect for PGAS Communication Runtime Systems**, *A. Vishnu*, *M. Bruggencate*, *and R. Olson*, Symposium on High Performance Interconnects, 2011.
 - IPDPS'11 **Iso-Energy-Efficiency: An Approach to Power-Constrained Parallel Computation**, *S. Song, C. Su, R. Ge, A. Vishnu, K. Cameron*, International Parallel and Distributed Processing Symposium, 2011.
 - CASS'11 **Dynamic Time-Variant Connection Management for PGAS Models on InfiniBand**, *A. Vishnu, M. Krishnan and P. Balaji*, Communication Architecture for Scalable Systems, 2011.
- EuroMPl'11 **Noncollective Communicator Creation in MPI**, J. Dinan, S. Krishnamoorthy, P. Balaji, J. Hammond, M. Krishnan, V. Tipparaju, and A. Vishnu, EuroMPI, 2011.
 - JCTC'11 Designing a Scalable Fault Tolerance Model for High Performance Computational Chemistry: A Case Study with Coupled Cluster Perturbative Triples, H. v. Dam, A. Vishnu and W. d. Jong, Journal of Chemical Theory and Computation, 2011.
 - CCGrid'10 **Efficient On-Demand Connection Management Mechanisms with PGAS Models over InfiniBand**, *A. Vishnu and M. Krishnan*, International Conference on Cluster, Cloud and Grid Computing, 2010.

- GreenCom'10 Designing Energy Efficient Communication Runtime Systems for Data Centric Programming Models, A. Vishnu, S. Song, A. Marquez, K. Barker, D. Kerbyson and P. Balaji, International Conference on Green Computing and Communications, 2010.
 - CAC'10 Designing topology-aware collective communication algorithms for large scale Infini-Band clusters: Case studies with Scatter and Gather, K. Kandalla, H. Subramoni, A. Vishnu and D. Panda, Communication Architecture for Clusters, 2010.
 - HiPC'10 Fault Tolerant Communication Runtime Support for Data Centric Programming Models, A. Vishnu, H. v. Dam, W. d. Jong, P. Balaji and S. Song, International Conference on High Performance Computing, 2010.
 - CCPE'09 **Topology Agnostic Hot-Spot Avoidance with InfiniBand**, A. Vishnu, M. Koop, A. Moody, A. Mamidala, S. Narrravula and D. Panda, Concurrency and Computation: Practice and Experience, 2009.
 - Cluster'09 **A Hardware-Software Approach to Network Fault Tolerance with InfiniBand**, *A. Vishnu, M. Krishnan and D. Panda*, International Conference on Cluster Computing, 2009.
 - PPoPP'07 On using connection-oriented vs. connection-less transport for performance and scalability of collective and one-sided operations: trade-offs and impact., A. Mamidala, S. Narravula, A. Vishnu, G. Santhanaraman and D. Panda, Principles and Practice of Parallel Programming, 2007.
 - CCGrid'07 **Hot-Spot Avoidance With Multi-Pathing Over InfiniBand: An MPI Perspective**, A. Vishnu, M. Koop, A. Moody, A. Mamidala, S. Narravula and D. Panda, International Conference on Cluster and Grid Computing, 2007.
 - CCGrid'07 **High Performance Distributed Lock Management Services using Network-based Remote Atomic Operations**, *S. Narravula*, *A. Mamidala*, *A. Vishnu*, *K. Vaidyanathan and D. Panda*, International Conference on Cluster and Grid Computing, 2007.
 - ICPP'07 **High Performance MPI over iWARP: Early Experiences**, *S. Narravula*, *A. Mamidala*, *A. Vishnu*, *G. Santhanaraman and D. Panda*, International Conference on Parallel Processing, 2007.
 - SC'06 A software based approach for providing network fault tolerance in clusters with uDAPL interface: MPI level design and performance evaluation, A. Vishnu, P. Gupta, A. Mamidala, and D. Panda, International Conference on High Performance Networking and Storage, 2006.
- EuroMPl'06 **Efficient Shared Memory and RDMA Based Design for MPI-Allgather over Infini-Band**, *A. Mamidala*, *A. Vishnu*, *and D. Panda*, European Conference on MPI, 2006.
 - Hotl'06 Memory Scalability Evaluation of the Next-Generation Intel Bensley Platform with InfiniBand, M. Koop, W. Huang, A. Vishnu and D. Panda, Symposium on High Performance Interconnects, 2006.
 - Micro'05 **Evaluating InfiniBand Performance with PCI Express**, *J. Liu, A. Mamidala, A. Vishnu and D. Panda*, IEEE Micro, 2005.
 - HiPC'05 Supporting MPI-2 One Sided Communication on Multi-rail InfiniBand Clusters: Design Challenges and Performance Benefits., A. Vishnu, G. Santhanaraman, W. Huang, H.-W. Jin and D. Panda, International Conference on High Performance Computing, 2005.
 - Hotl'05 Can Memory-Less Network Adapters Benefit Next-Generation InfiniBand Systems?, S. Sur, A. Vishnu, H.-W. Jin, W. Huang and D. Panda , Symposium on High Performance Interconnects, 2005.
 - SC'04 **Building Multirail InfiniBand Clusters: MPI-Level Design and Performance Evaluation**, *J. Liu, A. Vishnu and D. Panda*, International Conference on High Performance Networking and Storage, 2004.

Hotl'04 **Performance Evaluation of InfiniBand with PCI Express**, *J. Liu, A. Mamidala, A. Vishnu and D. Panda*, Symposium on High Performance Interconnects, 2004.

Posters

- SC'17 **Desh: Deep Learning for System Health Resilience**, A. Das, C. Siegel, A. Vishnu and F. Mueller, International Conference on High Performance Networking, Storage and Analysis, 2017
- ModSim'15 **Fault Modeling of Extreme Scale Applications using Machine Learning**, A. Vishnu, H. v. Dam, N. Tallent, D. Kerbyson, A. Hoisie, DOE Modeling and Simulation Workshop, 2015.
 - SC'14 Diagnosing Network Bottlenecks: One-sided Message Contention, N. Tallent, A. Vishnu, H. v. Dam, J. Daily, D. Kerbyson, A. Hoisie, International Conference on High Performance Networking, Storage and Analysis, 2014.
 - SC'13 **PGAS Models using MPI Runtime: Design Alternatives and Performance Evaluation**, *J. Daily, A. Vishnu, B. Palmer, and H. v. Dam*, International Conference on High Performance Networking, Storage and Analysis, 2013.

Position Papers

- ModSim'14 Exploring Machine Learning Techniques for Dynamic Modeling on Future Exascale Systems, S. Song, N. Tallent and A. Vishnu, Modeling and Simulation of Exascale Systems and Applications, 2014.
- ModSim'13 Application-specific Modeling of Performance and Power in Concert, K. Barker, D. Kerbyson, A. Hoisie and A. Vishnu, Modeling and Simulation of Exascale Systems and Applications, 2013.
- ScalPerf'10 **Exploring Power Consumption in Extreme Scale Systems**, *K. Barker*, *D. Kerbyson*, *A. Hoisie*, *A. Marquez*, and *A. Vishnu*, Scalable Approaches to High Performance and High Productivity Computing, 2010.

Professional Activities Chairman and Editorships

- P2S2'18 International Workshop on Parallel Programming Models and Systems Software, M. Si, A. Vishnu, and Y. Chen, International Conference on Parallel Processing, 2018.
- GraML'18 International Workshop on the Intersection of Graph Algorithms and Machine Learning, A. Gebremedhin, and A. Vishnu, International Parallel and Distributed Processing Symposium, 2018.
 - P2S2'17 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen*, International Conference on Parallel Processing, 2017.
 - P2S2'16 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2016.
 - P2S2'15 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2015.
- ParLearning'14 International Workshop on Parallel and Distributed Computing for Large Scale Machine Learning and Big Data Analysis, A. Vishnu, and Y. Xia, International Parallel and Distributed Processing Symposium, 2014.
 - P2S2'14 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2014.

- P2S2'13 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2013.
- P2S2'12 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2012.
- P2S2'11 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2011.
- P2S2'10 International Workshop on Parallel Programming Models and Systems Software, *P. Balaji, A. Vishnu, and Y. Chen,* International Conference on Parallel Processing, 2010.

Technical Program Committee

- SC **2018**, International Conference on High Performance Computing, Networking, Storage and Analysis.
- IPDPS 2018, 2017, 2016, International Parallel and Distributed Processing Symposium.
- HiPC **2018, 2017, 2016, 2015, 2014, 2013, 2012**, International Conference on High Performance Computing.
- CCGrid 2016, 2014, 2012, 2011, International Conference on Cluster, Cloud and Grid Computing.
- Cluster 2012, 2010, International Conference on Cluster Computing.
 - ICPP 2012, International Conference on Parallel Processing.
 - NCP 2012, International Conference on Network and Parallel Computing.
- PASA 2013, International Workshop on Power Aware Systems and Architecture.
- CASS 2013,2012, International Workshop on Communication Architecture for Scalable Systems.
- PGAS 2012, International Conferece on Partitioned Global Address Space Models.
- HPCC 2010, International Conferece on High Performance Computing and Communications.
- CloudCom 2012, International Conferece on Cloud Computing.
 - ICCCN 2011, International Conferece on Computer and Communication Networks.