

Haitao Yuan

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RESEARCH INTERESTS	Cloud computing, data center, green computing, energy optimization, performance modeling and analysis, meta-heuristic optimization algorithms	
EDUCATION	New Jersey Institute of Technology , Newark, New Jersey USA	
	Ph.D., Computer Engineering,	01/2019–08/2020
	<ul style="list-style-type: none">• Dissertation Title: “Energy and Performance-optimized Scheduling Methods for Tasks in Distributed Cloud and Edge Computing Systems”• Advisor: Prof. MengChu Zhou, Distinguished Professor, IEEE Fellow	
	Beihang University , Beijing, China	
	Ph.D., Modeling Simulation Theory and Technology,	09/2012–07/2016
	<ul style="list-style-type: none">• Dissertation Title: “Researches on Request Scheduling and Resouce Allocation in Cloud Data Centers”• Advisor: Prof. Bo Hu Li, Academician, Chinese Academy of Engineering	
	Northeastern University , Shenyang, China	
	M.E., Software Engineering,	09/2010–07/2012
	Northeastern University , Shenyang, China	
	B.E., Software Engineering,	08/2006–07/2010
ACADEMIC EXPERIENCE	New Jersey Institute of Technology , Newark, New Jersey USA	
	Ph.D. Candidate, Department of Electrical and Computer Engineering, Advisor: Prof. MengChu Zhou , Distinguished Professor, IEEE Fellow	01/2019–08/2020
	Beijing Jiaotong University , Beijing, China	
	Associate Professor , Software Engineering,	11/2018–12/2018
	Beijing Jiaotong University , Beijing, China	
	Assistant Professor , Software Engineering,	05/2016–10/2018
	New Jersey Institute of Technology , Newark, New Jersey USA	
	Visiting Scholar , Software Engineering, Advisor: Prof. MengChu Zhou , Distinguished Professor, IEEE Fellow	12/2017–11/2018
	New Jersey Institute of Technology , Newark, New Jersey USA	
	Visiting Ph.D. Student, Department of Electrical and Computer Engineering, Advisor: Prof. MengChu Zhou , Distinguished Professor, IEEE Fellow	10/2015-01/2016
	City University of Hong Kong , Kowloon, Hong Kong	

Ph.D. Student, Department of Computer Science,
Advisor: **Prof. Xiaohua Jia**, Chair Professor, IEEE Fellow

08/2013-02/2014

RESEARCH AND
DEVELOPMENT
GRANTS

1. Big Data-driven Method for Intelligent Scheduling and Resource Optimization of Deep Space-time Sensitive Cloud Workflow, National Natural Science Foundation of China, 61802015, 01/2019–12/2021, **270,000 RMB, PI**
2. Parallel Big Data Analysis and Deep Learning Model Construction in Water Environment, Beijing Jiaotong University, R19L00150, 11/2019–12/2020, **210,000 RMB, PI**
3. Data Feature Extraction Method and Software Implementation for Complex System Simulation, Beijing Jiaotong University, R19L00070, 04/2019–12/2021, **220,000 RMB, PI**
4. Design and Software Implementation of Intent Recognition Model Based on Stack Autoencoder, Beijing Jiaotong University, R19L00060, 04/2019–12/2021, **130,000 RMB, PI**
5. Task Scheduling Algorithm for Space-time Awareness of Green Cloud Computing System, Beijing Jiaotong University, 2019JBM072, 04/2019–03/2021, **25,000 RMB, PI**
6. Dynamic Allocation and Optimization of Non-steady-state Hybrid Computing Resources Based on SDN, China Post-Doctoral Science Foundation, 2017T100034, 06/2017–12/2018, **150,000 RMB, PI**
7. Research on Time-sensitive Hybrid Request Scheduling and Optimization Methods for Cloud Data Centers, China Post-Doctoral Science Foundation, 2016M600912, 01/2017–04/2018, **50,000 RMB, PI**
8. Research on Time-aware Request Scheduling Method in Hybrid Cloud, Beijing Jiaotong University, 2016RC030, 07/2016–07/2018, **100,000 RMB, PI**

PATENTS

U.S. Patents

1. Ahmed Chiheb Ammari, **Haitao Yuan**, Jing Bi, MengChu Zhou, Yusuf Al-Turki and Abdullah Abusorrah, “Temporal Task Scheduling in a Hybrid System”, U.S. Patent No. 10528396, Issued Date: 01/07/2020.

Chinese Patents

1. **Haitao Yuan**, Jing Bi and Libo Zhang, Load-aware Request Routing Method in SDN-based Cloud Data Center, Patent No. CN106850726 B, Issued Date: 11/15/2019.
2. **Haitao Yuan** and Jing Bi, Revenue-based Request Access Control Method in Distributed Multi-cloud Data Center, Patent No. 2016104567265.
3. **Haitao Yuan**, Adaptive Multi-objective Hybrid Differential Evolution Algorithm Based on Simulated Annealing and Information Entropy, Patent No. 2019105016329.
4. **Haitao Yuan**, Spatio-temporal Sensitive Task Scheduling and Optimization Method in Distributed Remote Multiple Cloud Data Centers, Patent No. 201811054497X.
5. **Haitao Yuan**, Profit and Performance Sensitive Multi-objective Task Scheduling Method for Distributed Green Cloud Data Center, Patent No. 2018111885539.
6. **Haitao Yuan** and Nan Ying, Heuristic Request Scheduling Method for Delay-sensitive Applications in Multiple Cloud Data Centers, Patent No. 201711180352X.
7. **Haitao Yuan**, Space-aware Request Scheduling and Optimization Method in Distributed Green Cloud Data Centers, Patent No. CN108123995B, Issued Date: 02/21/2020.
8. **Haitao Yuan**, Execution Time Prediction Method of Simulation Requests Based on Deep Fuzzy Stack Autoencoder, Patent No. 2017110684330.
9. **Haitao Yuan**, Profit-sensitive Task Scheduling Method for Complex Simulation Workflow Applications, Patent No. 2017110407075.

Book Chapters

1. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Spatio-Temporal Multi-Application Request Scheduling in Energy-Efficient Data Centers,” *Energy Efficient Computing & Electronics: Devices to Systems*, CRC Press, Taylor & Francis Group, 2019.

Refereed Journal Articles: (*Corresponding author)

1. **Haitao Yuan** and MengChu Zhou, “Profit-maximized Collaborative Computation Offloading and Resource Allocation in Distributed Cloud and Edge Computing Systems,” *IEEE Transactions on Automation Science and Engineering*, pp. 1–12, 03/7/2020, Submitted. (**SCI, Q1, IF 5.524**)
2. **Haitao Yuan**, MengChu Zhou and Qing Liu, “Fine-grained and Arbitrary Task Scheduling for Heterogeneous Applications in Distributed Green Clouds,” *IEEE/CAA Journal of Automatica Sinica*, pp. 1–13, 01/23/2020, DOI: 10.1109/JAS.2020.1003177, Online, May 2020.
3. **Haitao Yuan** and MengChu Zhou, “Energy-consumption and Performance-optimized Task Scheduling in Distributed Data Centers,” *IEEE Transactions on Systems, Man and Cybernetics: Systems*, pp. 1–10, 11/03/2020, Submitted. (**SCI, Q1, IF 7.351**)
4. **Haitao Yuan** and MengChu Zhou, “Energy-efficient and QoS-optimized Adaptive Task Scheduling and Management in Cloud Data Centers,” *IEEE Transactions on Automation Science and Engineering*, pp. 1–12, 05/07/2020, Submitted. (**SCI, Q1, IF 5.524**)
5. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Geography-Aware Task Scheduling for Profit Maximization in Distributed Green Data Centers,” *IEEE Transactions on Cloud Computing*, pp. 1–11, 04/11/2019, Submitted. (**SCI, Q1, IF 5.967**)
6. **Haitao Yuan**, Jing Bi, MengChu Zhou, Qing Liu and Ahmed Ammari, “Bi-objective Task Scheduling for Distributed Green Data Centers,” *IEEE Transactions on Automation Science and Engineering*, pp. 1–12, 12/07/2019, DOI: 10.1109/TASE.2019.2958979. (**SCI, Q1, IF 5.524**)
7. **Haitao Yuan**, Heng Liu, Jing Bi and MengChu Zhou, “Revenue and Energy Cost-Optimized Biobjective Task Scheduling for Green Cloud Data Centers,” *IEEE Transactions on Automation Science and Engineering*, pp. 1–14, 01/16/2020, DOI: 10.1109/TASE.2020.2971512. (**SCI, Q1, IF 5.524**)
8. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Profit-Sensitive Spatial Scheduling of Multi-Application Tasks in Distributed Green Clouds,” *IEEE Transactions on Automation Science and Engineering*, pp. 1–10, 05/08/2019, DOI: 10.1109/TASE.2019.2909866. (**SCI, Q1, IF 5.524**)
9. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Multiqueue Scheduling of Heterogeneous Tasks With Bounded Response Time in Hybrid Green IaaS Clouds,” *IEEE Transactions on Industrial Informatics*, vol. 15, no. 10, pp. 5404–5412, Oct. 2019. DOI: 10.1109/TII.2019.2901518. (**SCI, Q1, IF 7.377**)
10. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Spatiotemporal Task Scheduling for Heterogeneous Delay-Tolerant Applications in Distributed Green Data Centers,” *IEEE Transactions on Automation Science and Engineering*, vol. 16, no. 4, pp. 1686–1697, Oct. 2019. DOI: 10.1109/TASE.2019.2892480. (**SCI, Q1, IF 5.524**)
11. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Temporal Task Scheduling of Multiple Delay-Constrained Applications in Green Hybrid Cloud,” *IEEE Transactions on Services Computing*. DOI: 10.1109/TSC.2018.2878561. (**SCI, Q1, IF 5.707**)
12. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Spatial Task Scheduling for Cost Minimization in Distributed Green Cloud Data Centers,” *IEEE Transactions on Automation Science and Engineering*, vol. 16, no. 2, pp. 729–740, Apr. 2019. DOI: 10.1109/TASE.2018.2857206. (**SCI, Q1, IF 5.524**)

13. **Haitao Yuan**, Jing Bi, MengChu Zhou and Khaled Sedraoui, "WARM: Workload-Aware Multi-Application Task Scheduling for Revenue Maximization in SDN-Based Cloud Data Center," *IEEE Access*, vol. 6, pp. 645–657, 2018. DOI: 10.1109/ACCESS.2017.2773645. (**SCI, Q1, IF 4.098**)
14. **Haitao Yuan**, Jing Bi, MengChu Zhou and A. C. Ammari, "Time-Aware Multi-Application Task Scheduling With Guaranteed Delay Constraints in Green Data Center," *IEEE Transactions on Automation Science and Engineering*, vol. 15, no. 3, pp. 1138–1151, Jul. 2018. DOI: 10.1109/TASE.2017.2741965. (**SCI, Q1, IF 5.524**)
15. **Haitao Yuan**, Jing Bi, Wei Tan, MengChu Zhou, Bo Hu Li and Jianqiang Li. "TTSA: An Effective Scheduling Approach for Delay Bounded Tasks in Hybrid Clouds," *IEEE Transactions on Cybernetics*, vol. 47, no. 11, pp. 3658–3668, Nov. 2017. DOI:10.1109/TCYB.2016.2574766. (**SCI, Q1, IF 10.387**)
16. **Haitao Yuan**, Jing Bi, Wei Tan and Bo Hu Li. "Temporal Task Scheduling with Constrained Service Delay for Profit Maximization in Hybrid Cloud," *IEEE Transactions on Automation Science and Engineering*, vol. 14, no. 1, pp. 337–348, Jan. 2017. DOI:10.1109/TASE.2016.2526781. (**SCI, Q1, IF 5.524**)
17. **Haitao Yuan**, Jing Bi, Wei Tan and Bo Hu Li. "CAWSAC: Cost-Aware Workload Scheduling and Admission Control for Distributed Cloud Data Centers," *IEEE Transactions on Automation Science and Engineering*, vol. 13, no. 2, pp. 976–985, Apr. 2016. DOI:10.1109/TASE.2015.2427234. (**SCI, Q1, IF 5.524**)
18. **Haitao Yuan**, Jing Bi and Bo Hu Li. "Workload-Aware Request Routing in Cloud Data Center Using Software-Defined Networking," *Journal of Systems Engineering and Electronics*, vol. 26, no. 1, pp.151–160, Feb. 2015. DOI:10.1109/JSEE.2015.00020. (**SCI, Q4, IF 0.721**)
19. **Haitao Yuan**, Jing Bi, Bo Hu Li and Wei Tan. "Cost-Aware Request Routing in Multi-Geography Cloud Data Centers Using Software-Defined Networking," *Enterprise Information Systems*, vol. 11, no. 3, pp. 359–388, Jun. 2015. DOI:10.1080/17517575.2015.1048833. (**SCI, Q2, IF 2.122**)
20. Jing Bi, Heng Liu, **Haitao Yuan** and MengChu Zhou, "Energy-aware and Bi-objective Scheduling of Green Cloud Tasks," *IEEE Transactions on Systems, Man and Cybernetics: Systems*, pp. 1–11, 01/27/2020, Submitted. (**SCI, Q1, IF 7.351**)
21. Jing Bi, **Haitao Yuan*** and MengChu Zhou, "Large-Scale Water Quality Prediction with Integrated Deep Neural Network," *IEEE Transactions on Systems, Man and Cybernetics: Systems*, pp. 1–11, 02/26/2020, Major revision. (**SCI, Q1, IF 7.351**)
22. Yang Fu, Zeyu Zheng, MengChu Zhou, **Haitao Yuan*** and Xiwang Guo, "New Results on Joint Classification of Vertical Structure of Ocean Properties at a Global Scale," *IEEE Access*, pp. 1–8, 03/24/2020, DOI: 10.1109/ACCESS.2020.2985527. (**SCI, Q1, IF 4.098**)
23. Jing Bi, **Haitao Yuan***, MengChu Zhou, Jia Zhang and Qing Liu, "ARIMA-Based Multi-Application Workload Prediction with Wavelet Decomposition and Savitzky-Golay Filter in Clouds," *IEEE Transactions on Systems, Man and Cybernetics: Systems*, pp. 1–10, 09/14/2019, Submitted. (**SCI, Q1, IF 7.351**)
24. Jing Bi, **Haitao Yuan***, Shuang Li, MengChu Zhou and Jia Zhang, "Time-aware and Short-term Task Prediction with a Deep Learning Approach in Cloud Data Centers," *IEEE Transactions on Automation Science and Engineering*, pp. 1–11, 03/02/2020, Submitted. (**SCI, Q1, IF 5.524**)
25. Jing Bi, Shuang Li, **Haitao Yuan*** and MengChu Zhou, "BG-LSTM: Integrated Deep Learning Method for Workload and Resource Prediction in Cloud Computing Systems," *IEEE Transactions on Automation Science and Engineering*, pp. 1–9, 03/04/2020, Submitted. (**SCI, Q1, IF 5.524**)

26. Jing Bi, **Haitao Yuan*** and MengChu Zhou, “Temporal Prediction of Multiapplication Consolidated Workloads in Distributed Clouds,” *IEEE Transactions on Automation Science and Engineering*, vol. 16, no. 4, pp. 1763–1773, Oct. 2019. DOI: 10.1109/TASE.2019.2895801. (**SCI, Q1, IF 5.524**)
27. Jing Bi, **Haitao Yuan**, Libo Zhang and Jia Zhang, “SGW-SCN: An Integrated Machine Learning Approach for Workload Forecasting in Geo-distributed Cloud Data Centers,” *Information Sciences*, vol. 481, pp. 57–68, May 2019. (**SCI, Q1, IF 5.524**)
28. Jing Bi, **Haitao Yuan*** and Wei Tan, “Deadlock Prevention for Service Orchestration via Controlled Petri Nets,” *Journal of Parallel and Distributed Computing*, vol. 124, pp. 92–105, Feb. 2019. (**SCI, Q2, IF 1.189**)
29. Jing Bi, **Haitao Yuan*** and MengChu Zhou, “A Petri Net Method for Compatibility Enforcement to Support Service Choreography,” *IEEE Access*, vol. 4, pp. 8581–8592, Sep. 2016. (**SCI, Q1, IF 4.098**)
30. Jing Bi, **Haitao Yuan***, Wei Tan and Bo Hu Li, “TRS: Temporal Request Scheduling with Bounded Delay Assurance in a Green Cloud Data Center,” *Information Sciences*, vol. 360, pp. 57–72, Sept. 2016. DOI: 10.1109/ACCESS.2016.2614325. (**SCI, Q1, IF 5.524**)
31. Jing Bi, **Haitao Yuan***, Ming Tie and Xiao Song, “Heuristic Virtual Machine Allocation for Multi-tier Ambient Assisted Living Applications in a Cloud Data Center,” *China Communications*, vol. 13, no. 5, pp. 56–65, May 2016. DOI: 10.1109/CC.2016.7489974. (**SCI, Q2, IF 1.514**)
32. Jing Bi, **Haitao Yuan***, *et al.*, “Application-Aware Dynamic Fine-Grained Resource Provisioning for Virtualized Cloud Data Centers,” *IEEE Transactions on Automation Science and Engineering*, vol. 14, no. 2, pp. 1172–1184, Apr. 2017. DOI: 10.1109/TASE.2015.2503325. (**SCI, Q1, IF 5.524**)
33. Jing Bi, **Haitao Yuan**, Ming Tie and Wei Tan, “SLA-Based Optimisation of Virtualised Resource for Multi-tier Web Applications in Cloud Data Centres,” *Enterprise Information Systems*, vol. 9, no. 7, pp. 743–767, Jun. 2015. (**SCI, Q2, IF 2.122**)
34. Jing Bi, **Haitao Yuan**, MengChu Zhou and Qing Liu, “Time-Dependent Cloud Workload Forecasting via Multi-Task Learning,” *IEEE Robotics and Automation Letters*, vol. 4, no. 3, pp. 2401–2406, Jul. 2019. DOI: 10.1109/LRA.2019.2899224. (**EI**)
35. Jing Bi, Tianzhi Feng and **Haitao Yuan***, “Real-time and Short-term Anomaly Detection for GWAC Light Curves,” *Computers in Industry*, vol. 97, pp. 76–84, May 2018. (**SCI, Q1, IF 4.769**)
36. Qingfeng Yao, Zeyu Zheng, Liang Qi, **Haitao Yuan**, Xiwang Guo, Ming Zhao, Zhi Liu and Tianji Yang, “Path Planning Method with Improved Artificial Potential Field—A Reinforcement Learning Perspective,” *IEEE Access*, pp. 1–9, 05/03/2020, Submitted. (**SCI, Q1, IF 4.098**)
37. Jing Bi, Tianzhi Feng, **Haitao Yuan** and Zhen Wei, “Time-aware Efficient Prediction and Anomaly Detection for Large-scale Light Curves,” *International Journal of Machine Intelligence and Sensory Signal Processing*, vol. 2, no. 2, pp. 173–188, Jul. 2018. (**EI**)

Peer-reviewed Conference Publications: (*Corresponding author)

1. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Profit-Maximized Task Offloading with Simulated-annealing-based Migrating Birds Optimization in Hybrid Cloud-Edge Systems,” *The 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2020)*, Toronto, Ontario, Canada, 2020, pp. 1–6, 05/15/2020, Submitted. (**EI**)
2. **Haitao Yuan** and Jing Bi, “Fine-grained Task Scheduling in Cloud Data Centers Using Simulated-annealing-based Bees Algorithm,” *The 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2020)*, Toronto, Ontario, Canada, 2020, pp. 1–6, 05/15/2020, Submitted. (**EI**)

3. Shuang Li, Jing Bi, **Haitao Yuan** and MengChu Zhou, “BG-LSTM: Predictive Workload and Resource for Cloud Systems,” *The 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2020)*, Toronto, Ontario, Canada, 2020, pp. 1–6, 05/15/2020, Submitted. (EI)
4. **Haitao Yuan**, Jing Bi and MengChu Zhou, “QoS and Profit Aware Task Scheduling with Simulated-Annealing-Based Bi-Objective Differential Evolution in Green Clouds,” *2019 IEEE 15th International Conference on Automation Science and Engineering (CASE)*, Vancouver, BC, Canada, 2019, pp. 904–909. (EI)
5. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Spatio-Temporal Scheduling of Heterogeneous Delay-Constrained Tasks in Geo-Distributed Green Clouds,” *IEEE 16th International Conference on Networking, Sensing and Control (ICNSC)*, Banff, Canada, 2019, pp. 287–292. (EI)
6. **Haitao Yuan** and Jing Bi, “Profit-Aware Spatial Task Scheduling in Distributed Green Clouds,” *2019 IEEE International Conference on Systems, Man and Cybernetics (SMC 2019)*, Bari, Italy, 2019, pp. 421–426. (EI)
7. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Revenue-sensitive Scheduling of Multi-application Tasks in Software-defined Cloud,” *2017 13th IEEE Conference on Automation Science and Engineering (CASE 2017)*, Xi’an, 2017, pp. 1566–1571. (EI)
8. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Cost-sensitive Task Routing and Resource Provisioning in Geo-distributed Clouds,” *2017 IEEE 14th International Conference on Networking, Sensing and Control (ICNSC 2017)*, Calabria, Italy, 2017, pp. 507–512. (EI)
9. **Haitao Yuan** and MengChu Zhou, “Energy Cost and Performance-Sensitive Bi-objective Task Scheduling in Distributed Data Centers,” *IEEE 17th International Conference on Networking, Sensing and Control (ICNSC 2020)*, Nanjing, China, 2020, pp. 1–6. (EI)
10. **Haitao Yuan**, Jing Bi, Jia Zhang, Wei Tan and Keman Huang, “Workload-Aware Revenue Maximization in SDN-Enabled Data Center,” *2017 IEEE 10th International Conference on Cloud Computing (CLOUD 2017)*, Honolulu, CA, USA, 2017, pp. 18–25. (EI)
11. **Haitao Yuan** and Jing Bi, “Location-Sensitive Resource Optimization for Profit Maximization in Distributed Data Centers,” *2019 IEEE International Conference on Systems, Man and Cybernetics (SMC 2019)*, Bari, Italy, 2019, pp. 39–44. (EI)
12. **Haitao Yuan**, Jing Bi, Bo Hu Li, *et al.*, “SLA-based Virtualized Resource Allocation for Multi-tier Web Application in Cloud Simulation Environment,” *2012 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2012)*, Hong Kong, 2012, pp. 1681–1685. (EI)
13. **Haitao Yuan**, Jing Bi and MengChu Zhou, “Geographical Scheduling of Multi-application Tasks for Cost Minimization in Distributed Green Data Centers,” *2018 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2018)*, Miyazaki, Japan, 2018, pp. 3171–3176. (EI)
14. **Haitao Yuan**, Jing Bi, Xiao Song, Bo Hu Li, Tingyu Lin, Jian Zhang, and Changshun Yan, “Revenue-Aware Request Admission Control in Distributed Simulation Data Centers,” *2016 International Simulation Multi-Conference (AsiaSim/SCS AutumnSim 2016)*, Beijing, China, 2016, pp. 615–623. (EI)
15. **Haitao Yuan**, Jing Bi, and MengChu Zhou, “Temporal-Variation-Aware Profit-Maximized and Delay-Bounded Task Scheduling in Green Data Center,” *2019 International Conference on Internet and Distributed Computing Systems (IDCS 2019)*, Napoli, Italy, 2019, pp. 203–212. (EI)
16. **Haitao Yuan**, Jing Bi, Bo Hu Li, and Xudong Chai, “An Approach to Optimized Resource Allocation for Cloud Simulation Platform,” *The 14th Asia Simulation Conference & the 33rd JSST Annual Conference: International Conference on Simulation Technology (AsiaSim & JSST 2014)*, Beijing, China, 2014, pp. 139–152. (EI)

17. Jing Bi, **Haitao Yuan**, Jia Zhang and MengChu Zhou, “Temporal Task Scheduling for Delay-Constrained Applications in Geo-Distributed Cloud Data Centers,” *2018 IEEE 11th International Conference on Cloud Computing (CLOUD 2018)*, San Francisco, CA, USA, 2018, pp. 138–145. (EI)
18. Jing Bi, **Haitao Yuan**, Junfei Qiao, MengChu Zhou and Xiao Song, “Temporal Request Scheduling for Energy-efficient Cloud Data Centers,” *2017 IEEE 14th International Conference on Networking, Sensing and Control (ICNSC 2017)*, Calabria, Italy, 2017, pp. 180–185. (EI)
19. Zhiliang Zhu, **Haitao Yuan**, et al, “WS-SCAN: An Effective Approach for Web Services Clustering,” *2010 International Conference on Computer Application and System Modeling*, Taiyuan, China, pp. 618–622. (EI)
20. Jing Bi, **Haitao Yuan**, Yushun Fan, Wei Tan, and Jia Zhang, “Dynamic Fine-Grained Resource Provisioning for Heterogeneous Applications in Virtualized Cloud Data Center,” *The 8th IEEE International Conference on Cloud Computing (CLOUD 2015)*, New York, USA, 2015, pp. 29–436. (EI)
21. Libo Zhang, Jing Bi and **Haitao Yuan**, “Workload Forecasting with Hybrid Stochastic Configuration Networks in Clouds,” *2018 5th IEEE International Conference on Cloud Computing and Intelligence Systems (CCIS 2018)*, Nanjing, China, 2018, pp. 112–116. (EI)
22. Zhiliang Zhu, Jing Bi, **Haitao Yuan** and Ying Chen, “SLA Based Dynamic Virtualized Resources Provisioning for Shared Cloud Data Centers,” *IEEE 4th International Conference on Cloud Computing (CLOUD 2011)*, Washington, DC, USA, 2011, pp. 630–637. (EI)
23. Jing Bi, Libo Zhang, **Haitao Yuan** and MengChu Zhou, “Hybrid Task Prediction Based on Wavelet Decomposition and ARIMA Model in Cloud Data Center,” *2018 IEEE 15th International Conference on Networking, Sensing and Control (ICNSC 2018)*, Zhuhai, China, 2018, pp. 1–6. (EI)
24. Jing Bi, Shuang Li, **Haitao Yuan**, Z. Zhao and H. Liu, “Deep Neural Networks for Predicting Task Time Series in Cloud Computing Systems,” *2019 IEEE 16th International Conference on Networking, Sensing and Control (ICNSC 2019)*, Banff, AB, Canada, 2019, pp. 86–91. (EI)
25. Jing Bi, Zhiliang Zhu, **Haitao Yuan**, et al., “A Petri Net Based Hybrid Optimal Controller for Deadlock Prevention in Web Service Composition,” *The 9th IEEE International Conference on Web Services (ICWS 2011)*, Washington DC, USA, 2011, pp. 718–719. (EI)
26. Jing Bi, Zhiliang Zhu, and **Haitao Yuan**, “SLA-Aware Dynamic Resource Provisioning for Profit Maximization in Shared Cloud Data Centers,” *ICHCC-ICTMF 2011*, Singapore, 2011, pp. 366–372. (EI)
27. Quanxi Dong, Yongze Lin, Jing Bi and **Haitao Yuan**, “An Integrated Deep Neural Network Approach for Large-Scale Water Quality Time Series Prediction,” *2019 IEEE International Conference on Systems, Man and Cybernetics (SMC 2019)*, Bari, Italy, 2019, pp. 3537–3542. (EI)
28. Heng Liu, Xiaofen Zhang, Jing Bi, **Haitao Yuan** and MengChu Zhou, “Intelligent Task Scheduling for Green Clouds with LSTM-based Prediction and Biobjective Optimization,” *IEEE 17th International Conference on Networking, Sensing and Control (ICNSC 2020)*, Nanjing, China, 2020, pp. 1–6. (EI)
29. Yongze Lin, Quanxi Dong, Jing Bi, **Haitao Yuan** and MengChu Zhou, “A Deep Learning Approach to Large-Scale Light Curve Prediction and Real-Time Anomaly Detection with Grubbs Criterion,” *IEEE 17th International Conference on Networking, Sensing and Control (ICNSC 2020)*, Nanjing, China, 2020, pp. 1–6. (EI)
30. Cheng Lu, Lei Peng, Jing Bi and **Haitao Yuan**, “An Improved Dro-Based Recurrent Neural Networks for Large-Scale Light Curve Time Series Prediction,” *2018 5th IEEE International Conference on Cloud Computing and Intelligence Systems (CCIS 2018)*, Nanjing, China, 2018, pp. 117–121. (EI)

31. Hongnan Xie, Xiao Song, Jing Bi, and **Haitao Yuan**, “VCG Auction Based Idle Instance Bidding to Increase IaaS Providers Profit in Hybrid Clouds,” *Asian Simulation Conference 2017*, Melaka, Malaysia, 2017, pp. 359–368. **(EI)**
32. Xiaodong Huang, Cheng Lu, Lei Peng, Jing Bi and **Haitao Yuan**, “A Deep Learning Approach to Large-Scale Light Curve Prediction and Real-Time Anomaly Detection with Grubbs Criterion,” *IEEE 17th International Conference on Networking, Sensing and Control (ICNSC 2020)*, Nanjing, China, 2020, pp. 1–6. **(EI)**
33. Hang Ji, Xiao Song, Xuejun Zhang, Jing Bi, and **Haitao Yuan**, “Internet Communication Engine (ICE) Based Simulation Framework (ISF),” *2016 International Simulation Multi-Conference (AsiaSim/SCS AutumnSim 2016)*, Beijing, China, 2016, pp. 92–101. **(EI)**
34. Huizhang Luo, Dan Huang, Qing Liu, Zhenbo Qiao, Hong Jiang, Jing Bi, **Haitao Yuan**, *et al.*, “Identifying Latent Reduced Models to Precondition Lossy Compression,” *2019 IEEE International Parallel and Distributed Processing Symposium (IPDPS 2019)*, Rio de Janeiro, Brazil, 2019, pp. 293–302. **(EI)**

SERVICES AND ACTIVITIES

- Technical Review Activities
 - Computer Networks
 - Computers in Industry
 - Frontiers of Information Technology & Electronic Engineering
 - Future Generation Computer Systems
 - IEEE Access
 - IEEE/CAA Journal of Automatica Sinica
 - IEEE Systems Journal
 - IEEE Transactions on Automation Science and Engineering
 - IEEE Transactions on Cloud Computing
 - IEEE Transactions on Cybernetics
 - IEEE Transactions on Industrial Informatics
 - IEEE Transactions on Intelligent Transportation Systems
 - IEEE Transactions on Parallel and Distributed Systems
 - IETE Journal of Research
 - International Journal of Production Research
 - Knowledge and Information Systems
 - KSII Transactions on Internet and Information Systems
 - Recent Patents on Engineering
 - Simulation Modelling Practice and Theory
 - Swarm Intelligence
 - The 17th IEEE International Conference on Networking, Sensing and Control (ICNSC 2020)
 - 2020 International Conference on Intelligent Robots and Systems (IROS 2020)
- International Conference Panel Session Chair
 - The 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2020), October 11–14, Toronto, Canada, 2020
 - The 17th IEEE International Conference on Networking, Sensing and Control, June, Nanjing, China, 2020

- The 2016 International Simulation Multi-Conference (AsiaSim/SCS AutumnSim 2016), October 14–17, Beijing, China, 2016
- Asia Simulation Conference & The International Conference on System Simulation and Scientific Computing, October 27–30, Shanghai, China, 2012
- International Conference Technical Program Committee
 - The 16th IEEE International Conference on Networking, Sensing and Control, May 9–11, Banff, Canada, 2019
 - The 14th IEEE International Conference on Networking, Sensing and Control, May 16–18, Calabria, Southern Italy, 2017
- Professional Memberships
 - IEEE, Chinese Simulation Society, China Computer Federation, IEEE Systems, Man, and Cybernetic

COURSES TAUGHT

- Undergraduate Courses (**4**)
 - Computer Networking (in English)
 - C++ Programming (in English)
 - Data Structure (in Chinese)
 - Enterprise Training (in Chinese)
- Graduate Courses (**3**)
 - Distributed Computing (in English)
 - Professional English (in English)
 - Software Project Management (in Chinese)

HONORS AND AWARDS

- “Best Paper Award-Finalist” from the 16th IEEE International Conference on Networking, Sensing and Control (IEEE ICNSC) (Top 2%), 2019.
- First Prize for Scientific and Technological Progress, China Simulation Association, 2016
- Outstanding Graduate Student, Beihang University, 2016
- National Scholarship of Graduate Students (Top 5%), Beihang University, 2015
- Full Tuition Scholarship for Two Years’ Study, 2010-2012.
- Outstanding Graduate Student, Northeastern University, 2012
- Google Excellence Scholarship, 2011