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EDUCATION

09/2006-11/2011 University of California, Riverside (UCR), USA

- Department of Computer Science and Engineering, **Ph. D**
- Advisor: Prof. Laxmi Bhuyan
- GPA: 3.87/4.0; Major GPA: 3.95/4.0

09/2002-06/2006 Beijing University of Posts & Telecommunications (BUPT), China

- School of Computer Science and Technology, **B.E**
- Overall GPA: 3.7/4.0; Major GPA: 3.9/4.0
- Rank: Top 3%, 5th out of 190

RESEARCH INTERESTS

- **Digital Health:** HIPAA-compliant cloud platform, mobile health, activity recognition, physiological signal processing, digital diagnosis/therapeutics/biomarker, care digitalization and predictive analytics.
- **Cloud Computing and Big Data:** Scalable and secure cloud application, big data store and processing using Hadoop/MapReduce framework and Spark ecosystem.
- **Distributed Database:** Time-series data platform, adaptive indexing, in-store stream processing, real-time query engine, database system modeling.
- **Intelligent Platform:** Distributed RDF store, bulk loading of triples, SPARQL query optimization, RDFS/OWL parallel inferencing.
- **Distributed Caching:** In-memory key-value storage for large-scale datacenter, high-throughput and low-latency object caching development.
- **Operating Systems:** Microkernel-based OS development, Linux run-time environment for multicore and manycore systems, scalability and security in resource management and device driver framework.
- **Networking Systems:** High-performance network card driver development, customized TCP/IP protocol optimization, time-series traffic generation.
- **Computer Architecture:** Parallel processing/multi-threading on multicore system, NUMA memory architecture, core/cache topology, power/thermal modeling.
- **Multicore Scheduling:** Parallel-pipeline scheduling, memory/cache/core-aware scheduling, power/energy optimization, thermal management.

RESEARCH EXPERIENCE

03/2021-present Director Scientist at Samsung Research America (SRA)

- **Digital Health.** Develop the second generation of HIPAA-compliant cloud platform on AWS. Partner with medical domain experts to develop advanced health features based on Samsung's mobile devices (smart phones, smart watches, earbuds) to help consumers

monitor and manage their health at home and on-the-go.

03/2017-02/2021 Senior Staff Research Scientist at Samsung Research America (SRA)

- **Digital Health.** Built SRA's first HIPAA-compliant end-to-end digital health platform for data collection, cloud processing and health data analytics. Co-innovated with major US hospitals to develop digital solutions and build services & prototypes for key disease states. Conducted real patient pilots and clinical trials to validate our research work.

03/2014-02/2017 Staff Research Engineer at Samsung Research America (SRA)

- **Connected and Mobile Health.** Prototyped a scalable and secure cloud application for facilitating doctor-patient interaction, monitoring and engagement. Developed Restful APIs to collect patient's data from smart phones/watches. Worked on data flow pipeline and database storage in the cloud.
- **Time-series Data Platform for IoT.** Developed an efficient and scalable time-series traffic generator. Developed a user-level network subsystem based on Linux exokernel framework. Worked on stream processing (in-store computing, indexing, storing and querying) large volume of time-series data for both SQL and NoSQL databases.
- **Intelligent Platform for Cloud.** Developed distributed RDF storage layer to store and retrieve billions of triples. Worked on parallel bulk loading for RDF triples based on MapReduce framework. Worked on SPARQL query optimization and parallel RDFS/OWL inferencing.

11/2011-02/2014 Senior Research Engineer at Samsung Research America (SRA)

- **Distributed Caching for Multicore servers.** Developed high throughput and low latency in-memory key-value storage system for large-scale datacenters in both Linux and L4 microkernel OS. Developed highly-optimized Intel 10G NIC driver and IP stack processing to accelerate the network subsystem.
- **OS Research for Multicore/Manycore Platforms.** Researched and prototyped L4 microkernel-based OS for future multicore/manycore systems. Built run-time environment to support scalable and secure resource management and device driver framework.

09/2007-11/2011 Research Assistant at Computer Architecture and Embedded System Group at UCR

- **Parallel Scheduling for Video Decoding.** Proposed an adaptive dynamic scheduling scheme for H.264/AVC decoding on cc-NUMA multicore architecture with 32 cores. This scheme uses multiple local queues to reduce thread contention and assigns tasks in a cache locality aware and load balancing fashion to optimize throughput and latency performance.
- **Power Optimization under Traffic Variation.** Proposed a traffic-aware and power-efficient Multicore system by translating traffic rate to optimal system operating level. The system can adjust the number of active cores and per-core frequency via the use of per-core DVFS, power gating and power migration techniques based on a new power model.
- **Thermal Management for Network Applications.** Proposed a predictive thermal model for generic periodic tasks and an online model update strategy using on-chip thermal sensors. Based on that, further designed, implemented and evaluated a thermal-aware scheduler for network applications running on multicore architecture.
- **Energy-efficient Scheduling for Transcoding.** Proposed an energy-efficient adaptive Highest Random Weight (HRW) hash scheduler by jointly taking into account three key factors that collectively play important roles in affecting transcoding performance on multicore servers: memory access, core/cache topology and transcoding format cost.

- **Power-efficient Scheduling for Packet Processing.** Proposed a scheduling algorithm to optimize both throughput and latency given a power budget for packet processing on multicore architectures. It addresses power-aware parallel-pipeline scheduling problem by optimally applying per-core DVFS.
- **Multicore Scheduling for Packet Processing.** Proposed a latency and throughput-aware packet processing system for multicore architectures based on parallel-pipeline core topology. It satisfies the latency constraint and produces high throughput by exploiting fine-grained task-level parallelism.

PUBLICATIONS

- Wenchuan Wei, Keiko Kurita, **Jilong Kuang** and Jun Alex Gao. *Real-Time Limb Motion Tracking with a Single IMU Sensor for Physical Therapy Exercises*. The 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021).
- Korosh Vatanparvar, Viswam Nathan, Ebrahim Nemati, Md Mahbubur Rahman, Dan McCaffrey, **Jilong Kuang** and Jun Alex Gao. *SpeechSpiro: Lung Function Assessment from Speech Pattern as an Alternative to Spirometry for Mobile Health Tracking*. The 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021).
- Mohsin Ahmed, Li Zhu, Md Mahbubur Rahman, Tousif Ahmed, **Jilong Kuang** and Jun Alex Gao. *Device Invariant Deep Neural Networks for Pulmonary Audio Event Detection Across Mobile and Wearable Devices*. The 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021).
- Tousif Ahmed, Md Mahbubur Rahman, Mohsin Ahmed, Ebrahim Nemati, Minh Dinh, Nathan Folkman, **Jilong Kuang** and Jun Alex Gao. *RRMonitor: A Resource-Aware End-to-End System for Continuous Monitoring of Respiration Rate Using Earable Devices*. The 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021).
- Shibo Zhang, Ebrahim Nemati, Tousif Ahmed, Md Mahbubur Rahman, **Jilong Kuang** and Jun Alex Gao. *A Novel Multi-Center Template-Matching Algorithm and Its Application for Cough Detection*. The 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021).
- Wenchuan Wei, Keiko Kurita, **Jilong Kuang** and Jun Alex Gao. *Real-Time 3D Arm Motion Tracking Using the 6-axis IMU Sensor of a Smartwatch*. The 2021 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2021).
- Md Mahbubur Rahman, Tousif Ahmed, Mohsin Ahmed, Ebrahim Nemati, Minh Dinh, Nathan Folkman, Md Mehedi Hasan, **Jilong Kuang** and Jun Alex Gao. *Towards Motion-Aware Passive Resting Respiratory Rate Monitoring Using Earbuds*. The 2021 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2021).
- Ebrahim Nemati, Shibo Zhang, Tousif Ahmed, Md Mahbubur Rahman, **Jilong Kuang** and Jun Alex Gao. *CoughBuddy: Multi-Modal Cough Event Detection Using Earbuds Platform*. The 2021 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2021).
- Hanbin Zhang, Li Zhu, Viswam Nathan, **Jilong Kuang**, Jacob Kim and Jun Alex Gao. *Better Battery Life: Towards Energy-Efficient Smartwatch-based Atrial Fibrillation Detection in Ambulatory Free-living Environment*. The 2021 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2021).
- Md Mahbubur Rahman, Bashima Islam, Tousif Ahmed, Mohsin Ahmed, Mehedi Hasan, Korosh

- Vatanparvar, Ebrahim Nemati, Viswam Nathan, **Jilong Kuang**, and Jun Alex Gao. *BreathTrack: Detecting Regular Breathing Phases from Unannotated Acoustic Data Captured by a Smartphone*. The 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2021).
- Hanbin Zhang, Li Zhu, Viswam Nathan, **Jilong Kuang**, Jacob Kim, Jun Alex Gao and Jeffrey Olgin, *Towards Early Detection and Burden Estimation of Atrial Fibrillation in an Ambulatory Free-living Environment*. The 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2021).
 - Xuhai Xu, Ebrahim Nemati, Korosh Vatanparvar, Viswam Nathan, Tousif Ahmed, Md Mahbubur Rahman, Daniel McCaffrey, **Jilong Kuang** and Jun Alex Gao, *Listen2Cough: Leveraging End-to-End Deep Learning Cough Detection Model to Enhance Lung Health Assessment Using Passively Sensed Audio*. The 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2021).
 - Md Mahbubur Rahman, Mohsin Ahmed, Tousif Ahmed, Bashima Islam, Viswam Nathan, Korosh Vatanparvar, Ebrahim Nemati, Daniel McCaffrey, **Jilong Kuang** and Jun Alex Gao, *BreathEasy: Assessing Respiratory Diseases Using Mobile Multimodal Sensors*. The 22nd ACM International Conference on Multimodal Interaction (ICMI 2020).
 - Tousif Ahmed, Mohsin Ahmed, Md Mahbubur Rahman, Ebrahim Nemati, Bashima Islam, Korosh Vatanparvar, Viswam Nathan, Daniel McCaffrey, **Jilong Kuang** and Jun Alex Gao, *Automated Time Synchronization of Multimodal Cough Events from Mobile Devices*. The 22nd ACM International Conference on Multimodal Interaction (ICMI 2020).
 - Nazir Saleheen, Tousif Ahmed, Md Mahbubur Rahman, Ebrahim Nemati, Viswam Nathan, Korosh Vatanparvar, Erin Blackstock and **Jilong Kuang**. *Lung Function Estimation from a Monosyllabic Voice Segment Captured Using Smartphones*. The 22nd International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI 2020).
 - Korosh Vatanparvar, Viswam Nathan, Ebrahim Nemati, Md Mahbubur Rahman and **Jilong Kuang**. *Adapting to Noise in Speech Obfuscation by Audio Profiling using Generative Models for Passive Health Monitoring*. The 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2020).
 - Korosh Vatanparvar, Ebrahim Nemati, Viswam Nathan, Md Mahbubur Rahman and **Jilong Kuang**. *CoughMatch – Subject Verification Using Cough for Personal Passive Health Monitoring*. The 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2020).
 - Vishwajith Ramesh, Korosh Vatanparvar, Ebrahim Nemati, Viswam Nathan, Md Mahbubur Rahman and **Jilong Kuang**. *CoughGAN: Generating Synthetic Coughs that Improve Respiratory Disease Classification*. The 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2020).
 - Md Juber Rahman, Ebrahim Nemati, Md Mahbubur Rahman, Korosh Vatanparvar, Viswam Nathan and **Jilong Kuang**. *Toward Early Severity Assessment of Obstructive Lung Disease Using Multi-Modal Wearable Sensor Data Fusion During Walking*. The 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2020).
 - Ebrahim Nemati, Md Juber Rahman, Erin Blackstock, Viswam Nathan, Md Mahbubur Rahman, Korosh Vatanparvar and **Jilong Kuang**. *Estimation of the Lung Function Using Acoustic Features of the Voluntary Cough*. The 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2020).
 - Ebrahim Nemati, Md Mahbubur Rahman, Viswam Nathan, Korosh Vatanparvar and **Jilong Kuang**. *A Comprehensive Approach for Classification of the Cough Type*. The 42nd Annual International Conference

of the IEEE Engineering in Medicine and Biology Society (EMBC 2020).

- Soujanya Chatterjee, Md Mahbubur Rahman, Tousif Ahmed, Nazir Saleheen, Ebrahim Nemati, Viswam Nathan, Korosh Vatanparvar and **Jilong Kuang**. *Assessing Severity of Pulmonary Obstruction from Respiration Phase-Based Wheeze Sensing Using Mobile Sensors*. The 2020 ACM CHI Conference on Human Factors in Computing Systems (CHI 2020).
- Md Mahbubur Rahman, Tousif Ahmed, Ebrahim Nemati, Viswam Nathan, Korosh Vatanparvar, Erin Blackstock and **Jilong Kuang**. *ExhaleSense: Detecting High Fidelity Forced Exhalations to Estimate Lung Obstruction on Smartphones*. The 18th Annual IEEE International Conference on Pervasive Computing and Communications (PerCom 2020).
- Keum San Chun, Viswam Nathan, Korosh Vatanparvar, Ebrahim Nemati, Md Mahbubur Rahman, Erin Blackstock and **Jilong Kuang**. *Towards Passive Assessment of Pulmonary Function from Natural Speech Recorded Using a Mobile Phone*. The 18th Annual IEEE International Conference on Pervasive Computing and Communications (PerCom 2020).
- Viswam Nathan, Md Mahbubur Rahman, Korosh Vatanparvar, Ebrahim Nemati, Erin Blackstock and **Jilong Kuang**. *Extraction of Voice Parameters from Continuous Running Speech for Pulmonary Disease Monitoring*. The 2019 IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2019).
- Md Juber Rahman, Ebrahim Nemati, Md Mahbubur Rahman, Viswam Nathan, Korosh Vatanparvar and **Jilong Kuang**. *Efficient Online Cough Detection with a Minimal Feature Set Using Smartphones for Automated Assessment of Pulmonary Patients*. The 9th International Conference on Ambient Computing, Applications, Services and Technologies (AMBIENT 2019).
- Soujanya Chatterjee, Md Mahbubur Rahman, Ebrahim Nemati, Viswam Nathan, Korosh Vatanparvar and **Jilong Kuang**. *mLung++: Automated Characterization of Abnormal Lung Sounds in Pulmonary Patients using Multimodal Mobile Sensors*. The 2019 UbiComp Workshop on Continual and Multimodal Learning for Internet of Things (CML-IOT 2019).
- Ebrahim Nemati, Md Mahbubur Rahman, Viswam Nathan, Korosh Vatanparvar and **Jilong Kuang**. *Comprehensive Approach for Cough Type Detection: Importance of Rigorous Annotation and A Colorful Feature-Set*. The 4th IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE 2019).
- Md Juber Rahman, Ebrahim Nemati, Md Mahbubur Rahman, Viswam Nathan, Korosh Vatanparvar and **Jilong Kuang**. *Automated Assessment of Pulmonary Patients using Heart Rate Variability from Everyday Wearables*. The 4th IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE 2019).
- Mohsin Ahmed, Md Mahbubur Rahman and **Jilong Kuang**. *DeepLung: Smartphone Convolutional Neural Network-based Inference of Lung Anomalies for Pulmonary Patients*. The 20th Annual Conference of the International Speech Communication Association (INTERSPEECH 2019).
- Soujanya Chatterjee, Md Mahbubur Rahman, Ebrahim Nemati and **Jilong Kuang**. *WheezeD: Respiration Phase Based Wheeze Detection Using Acoustic Data From Pulmonary Patients Under Attack*. The 13th EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2019).
- Md Mahbubur Rahman, Viswam Nathan, Ebrahim Nemati, Korosh Vatanparvar, Mohsin Ahmed and **Jilong Kuang**. *Towards Reliable and Accurate Data Collection and Annotation to Extract Pulmonary Biomarkers using Mobile Sensors*. The 13th EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2019).
- Viswam Nathan, Korosh Vatanparvar, Md Mahbubur Rahman, Ebrahim Nemati and **Jilong Kuang**. *Assessment of Chronic Pulmonary Disease Patients Using Biomarkers from Natural Speech Recorded by*

- Mobile Devices*. The 2019 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2019).
- Mohsin Ahmed, Md Mahbubur Rahman, Viswam Nathan, Ebrahim Nemati, Korosh Vatanparvar and **Jilong Kuang**. *mLung: Privacy-Preserving Naturally Windowed Lung Activity Detection for Pulmonary Patients*. The 2019 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2019).
 - Korosh Vatanparvar, Viswam Nathan, Ebrahim Nemati, Md Mahbubur Rahman and **Jilong Kuang**. *A Generative Model for Speech Segmentation and Obfuscation for Remote Health Monitoring*. The 2019 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2019).
 - Sujee Lee, Ebrahim Nemati and **Jilong Kuang**. *Configurable Pulmonary-Tuned Privacy Preservation Algorithm for Mobile Devices*. The 2018 IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2018).
 - Qinghan Xue, Xiaoran Wang, Samuel Meehan, **Jilong Kuang**, Jun Alex Gao and Mooi Choo Chuah. *Recurrent Neural Networks-based Obesity Status Prediction Using Activity Data*. The 17th IEEE International Conference on Machine Learning and Applications (ICMLA 2018).
 - Md Mahbubur Rahman, Ebrahim Nemati, Viswam Nathan and **Jilong Kuang**. *InstantRR: Instantaneous Respiratory Rate Estimation on Context-aware Mobile Devices*. The 13th EAI International Conference on Body Area Networks (BODYNETS 2018).
 - Ebrahim Nemati, Md Mahbubur Rahman, Viswam Nathan and **Jilong Kuang**. *Private Audio-Based Cough Sensing for In-Home Pulmonary Assessment using Mobile Devices*. The 13th EAI International Conference on Body Area Networks (BODYNETS 2018).
 - Xiaoran Wang, Leonardo Jimenez Rodriguez and **Jilong Kuang**. *Modeling Topics on Open Source Apache Spark Repositories*. The 14th International Conference on Data Science (ICDATA 2018).
 - Leonardo Jimenez Rodriguez, Xiaoran Wang and **Jilong Kuang**. *Insights on Apache Spark Usage by Mining Stack Overflow Questions*. The 2018 IEEE 7th International Congress on Big Data (BigData Congress 2018).
 - Daniyal Liaqat, Ebrahim Nemati, Md Mahbubur Rahman and **Jilong Kuang**. *A Method for Preserving Privacy During Audio Recordings by Filtering Speech*. The 1st IEEE Life Sciences Conference (LSC 2017).
 - Ebrahim Nemati, Daniyal Liaqat, Md Mahbubur Rahman and **Jilong Kuang**. *A Novel Algorithm for Activity State Recognition Using Smartwatch Data*. The IEEE-NIH 2017 Special Topics Conference on Healthcare Innovations and Point-of-Care Technologies (HI-POCT 2017).
 - **Jilong Kuang**, Daniel Waddington and Changhui Lin. *Techniques for Fast and Scalable Time Series Traffic Generation*. The 2015 IEEE International Conference on Big Data (BigData 2015).
 - Dung Vu, **Jilong Kuang** and Laxmi Bhuyan. *A Scalable Hash Scheduler for Decoding of Multiple H.264/AVC Streams on Multi-core*. The 2014 IEEE International Conference on Multimedia & Expo (ICME 2014).
 - Ahmed Osama Fathy Atya and **Jilong Kuang**. *RUFC: A Flexible Framework For Reliable UDP With Flow Control*. The 8th International Conference for Internet Technology and Secured Transactions (ICITST 2013).
 - Daniel Waddington, Juan Colmenares, **Jilong Kuang** and Fengguang Song. *KV-Cache: A Scalable High-Performance Web-Object Cache for Manycore*. The 6th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2013).
 - **Jilong Kuang**, Daniel Waddington and Chen Tian. *Towards A Scalable Microkernel Personality for Multicore Processors*. The 19th International European Conference on Parallel and Distributed Computing (Euro-Par 2013).
 - Chen Tian, Daniel Waddington and **Jilong Kuang**. *A Scalable Physical Memory Allocation Scheme For L4 Microkernel*. The 36th Annual IEEE Computer Software and Applications Conference – Industry Track

(COMPSAC 2012).

- Dung Vu, **Jilong Kuang** and Laxmi Bhuyan. *An Adaptive Dynamic Scheduling Scheme for H.264/AVC Decoding on Multicore Architecture*. The 2012 IEEE International Conference on Multimedia & Expo (ICME 2012).
- **Jilong Kuang**, Laxmi Bhuyan and Raymond Klefstad. *Traffic-aware Power Optimization for Network Applications on Multicore Servers*. The 49th Design Automation Conference (DAC 2010).
- **Jilong Kuang** and Laxmi Bhuyan. *Predictive Model-based Thermal Management for Network Applications*. The 7th ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS 2011).
- **Jilong Kuang**, Laxmi Bhuyan, Haiyong Xie and Danhua Guo. *E-AHRW: An Energy-efficient Adaptive Hash Scheduler for Stream Processing on Multi-core Servers*. The 7th ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS 2011).
- **Jilong Kuang**, Danhua Guo and Laxmi Bhuyan. *Power Optimization for Multimedia Transcoding on Multicore Servers*. The 6th ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS 2010).
- **Jilong Kuang** and Laxmi Bhuyan. *LATA: A Latency and Throughput-Aware Packet Processing System*. The 47th Design Automation Conference (DAC 2010).
- **Jilong Kuang** and Laxmi Bhuyan. *Optimizing Throughput and Latency under Given Power Budget for Network Packet Processing*. The 29th IEEE Conference on Computer Communications (INFOCOM 2010).

PATENTS

- Mahbubur Rahman, **Jilong Kuang**, Daniyal Liaqat, Jun Gao and Nasson Boroumand. *Estimating Body Composition on a Mobile Device*. (Samsung Electronics Co., Ltd., US 10674967B2)
- **Jilong Kuang**, Daniel Waddington and Chen Tian. *Quota-based Adaptive Resource Balancing in a Scalable Heap Allocator for Multithreaded Applications*. (Samsung Electronics Co., Ltd., US 20140282589)
- **Jilong Kuang**, Daniel Waddington and Juan Colmenares. *Caching Architecture for Packet-form In-memory Object Caching*. (Samsung Electronics Co., Ltd., US 20140337459)

PROFESSIONAL ACTIVITIES

- Reviewed papers for UCC 2015 (The 8th IEEE/ACM International Conference on Utility and Cloud Computing)
- Reviewed papers for ISORC 2015 (The 18th IEEE Symposium On Real-time Computing)
- Reviewed papers for UCC 2014 (The 7th IEEE/ACM International Conference on Utility and Cloud Computing)
- Reviewed papers for NPC 2014 (The 11th IFIP International Conference on Network and Parallel Computing)
- Reviewed papers for ICC 2014 (The 2014 IEEE International Conference on Communications)
- Reviewed papers for INFOCOM 2013 (The 32nd IEEE International Conference on Computer Communications)
- Reviewed papers for ISSRE 2012 (The 23rd IEEE International Symposium on Software Reliability Engineering)
- External reviewer for DAC 2012 (The 49th Design Automation Conference)

- External reviewer for DAC 2011 (The 48th Design Automation Conference)
- Reviewed papers for HPCA 2010 (The 16th IEEE International Symposium on High-Performance Computer Architecture)
- Reviewed papers for ANCS 2010 (The 6th ACM/IEEE Symposium on Architecture for Networking and Communications Systems)
- Reviewed papers for TPDS (IEEE Transactions on Parallel and Distributed Systems)
- Reviewed papers for TC (IEEE Transactions on Computers)
- Reviewed papers for ToN (IEEE/ACM Transactions on Networking)
- Reviewed papers for Parallel Computing (ELSEVIER Journal)
- Reviewed papers for Computer Networks (ELSEVIER Journal)
- Reviewed papers for IJAC (International Journal of Automation and Computing)
- Reviewed papers for Sensors (MDPI Open Access Journal)
- Reviewed papers for China Communications
- ACM/IEEE member

SKILLS

- **Languages:** English (fluent), Spanish (fluent) and Chinese (native)
- **Programming:** C/C++, Java, Web, Bash Scripting, SQL, Big Data, Hadoop, MapReduce, Spark

HONORS & AWARDS

- Samsung Research America 10-year Service Award, 2021
- Most Downloaded Paper Award, Elsevier Smart Health 2020
- Samsung Research America President's Award, 2020
- Samsung Electronics Corporate/SR Award, 2020
- Best Industry Paper Award, IEEE PerCom 2020
- Samsung Research R&D Challenger Award, 2019
- Samsung Electronics Annual Award - Bronze, 2019
- Samsung Research America Spot Award, 2019-2021
- Best Poster Award, IEEE BSN 2019
- Samsung Research America 5-year Service Award, 2016
- Samsung Best Paper Awards - Gold Medal, 2013
- Samsung Outstanding Achievement Award, 2012
- Student Travel Grant Award, ANCS 2010 and ANCS 2011
- President of Chinese Students & Scholars Association at UCR, 2007-2010
- Dean's Distinguished Fellowship Award, UCR, 2006-2008
- Excellent Undergraduate Thesis Award, BUPT, 2006
- Top Grade Scholarship, BUPT, 2002-2006