Schedule at a Glance

December 5 (Thursday)	December 6 (Friday)	December 7 (Saturday)
Registration **(9:00 – 17:00)**		
Opening Ceremony **(9:30 – 10:00)**		
Keynote Speech 1 **(10:00 – 11:00)**	**Keynote Speech 3** **(10:00 – 11:00)**	**Keynote Speech 4** **(10:00 – 11:00)**
Coffee Break **(11:00 – 11:20)**	**Coffee Break** **(11:00 – 11:20)**	**Coffee Break** **(11:00 – 11:20)**
Keynote Speech 2 **(11:30 – 12:30)**	**Parallel Sessions** **(11:20 – 12:30)**	**Parallel Sessions** **(11:20 – 13:00)**
Lunch **(12:30 – 13:30)**	**Lunch** **(12:30 – 13:30)**	**Lunch** **(13:00 – 14:00)**
Parallel Sessions **(13:30 – 15:10)**	**Parallel Sessions** **(13:30 – 15:10)**	
Coffee Break **(15:10 – 15:30)**	**Coffee Break** **(15:10 – 15:30)**	
Parallel Sessions **(15:30 – 17:10)**	**Parallel Sessions** **(15:30 – 17:10)**	
Dinner Banquet at Novotel Hotel **(18:30 – 20:30)**	**Dinner at Australia Outback Spectacular (coach leaves at 18:10 from Novotel, Dinner is served from 19:30)**	

Program Details

Day 1: December 5, 2019 (Thursday)	
9:00 - 17:00	**Registration**
9:30 - 10:00	**Opening Ceremony**
10:00 - 11:00	**Keynote Speech 1** **Seeking Performance Portability on Graph Analytics** Prof. Ümit V. Çatalyürek, Georgia Institute of Technology, USA
11:00 - 11:20	**Coffee /Tea Break**
11:30 - 12:30	**Keynote Speech 2** **Trusted Decision Making** Prof. Jin Song Dong, National University of Singapore
12:30 - 13:30	**Lunch**
13:30 - 15:10	**Parallel Sessions** **Session 1A: Wireless Networks I** **Session Chair: Can Wang** **Min-Max Movement of Sink-Based Mobile Sensors in the Plane for Barrier Coverage** *Wenjie Zou (Fuzhou University), Longkun Guo (Fuzhou University), and Peihuang Huang (Minjiang University)* **An Energy-Saving Routing Algorithm for Opportunity Networks Based on Sleeping Mode** *Zhou Chunyue (Beijing Jiaotong University), Tian Hui (Griffith University), Dong Yaocong (Beijing Jiaotong University), and Zhong Baitong (Uniview)* **Base Station Positioning in Single-Tiered Wireless Sensor Networks** *Xinchen Li (Shenzhen University), Huan Cai (Shenzhen University), Gang Liu (Shenzhen University), and Kezhong Lu (Shenzhen University)* **Low-Energy Dynamic Clustering Scheme for Wireless Sensor Networks** *Wenqi Zhang (Beijing Jiaotong University), Jingjing Yu (Beijing Jiaotong University), Xingchun Liu (Beijing Jiaotong University), Ying Tao (China Academy of Space Technology), and Shubo Ren (China Academy of Space Technology)* **Session 1B: Parallel/Distributed Architectures** **Session Chair: Wee Lum Tan** **Parallel Tracking and Reconstruction of States in Heuristic Optimization Systems on GPUs** *Marcel Köster (German Research Center for Artificial Intelligence), Julian Groß (German Research Center for Artificial Intelligence), and Antonio Krüger (German Research Center for Artificial Intelligence)* **FPGA-Based Parallel Multi-Core GZIP Compressor in HDFS** *Haoxin Luo (Shenzhen University), Ye Cai (Shenzhen University), Qiuming Luo (Shenzhen University), and Rui Mao (Shenzhen University)* **GPU Parallel Acceleration of Frequency Domain Algorithm for Calculating Radar Target Echoes** *Zhao Naixuan (University of Electronic Science and Technology of China), Zhang Ge (University of Electronic Science and Technology of China), Wang Zijian (University of Electronic Science and Technology of China), and Kuang Ling (University of Electronic Science and Technology of China)*

Accelerating Alignment for Short Reads Allowing Insertion of Gaps on Multi-Core Cluster
  Yongjie Yang (Guangxi University, Shanghai Rural Commercial Bank),
  Cheng Zhong (Guangxi University), and Danyang Chen (Guangxi University)

Session 1C: Scheduling and Resource Allocation

Session Chair: M. Reza HoseinyFarahabady

Real-Time Stream Data Processing at Scale
  M. Reza HoseinyFarahabady (The University of Sydney), Ali Jannesari (Iowa State University),
  Wei Bao (The University of Sydney), Zahir Tari (RMIT University), and
  Albert Y. Zomaya (The University of Sydney)

I/O Scheduling for Limited-Size Burst-Buffers Deployed High Performance Computing
  Benbo Zha (Sun Yat-Sen University) and Hong Shen (Sun Yat-Sen University, University of Adelaide)

Task Merging and Scheduling for Parallel Deep Learning Applications in Mobile Edge Computing
  Xin Long (Guangdong University of Technology), Jigang Wu (Guangdong University of Technology),
  Yalan Wu (Guangdong University of Technology), and Long Chen (Guangdong University of Technology)

Coordinated and Hindsight Resources Allocation in Distributed Computing
  Victor Toporkov (National Research University "MPEI") and Dmitry Yemelyanov (National Research University "MPEI")

Session 1D: Security and Privacy I

Session Chair: Huaxi Gu

Plaintext Recovery Attacks and Their Mitigation in an Application-Specific SHE Scheme
  Tikaram Sanyashi (IIT Bombay), Anasuya Acharya (IIT Bombay), and
  Bernard Menezes (IIT Bombay)

Finite Approximate Consensus for Privacy in Distributed Sensor Networks
  Matt O'Connor (Victoria University of Wellington) and
  W. Bastiaan Kleijn (Victoria University of Wellington)

Modeling Data Transmission in Mobile Ad-hoc Networks for Characterizing Black-Hole Attacks
  Mnar Saeed Alnaghes (The University of Adelaide) and Hong Shen (Sun Yat-sen University)

Privacy Preservation for Network Traffic Classification
  Yue Lu (Beijing Jiaotong University), Hui Tian (Griffith University),
  and Jingjing Yu (Beijing Jiaotong University)

15:10 - 15:30	**Coffee/Tea Break**

Parallel Sessions

Session 2A: Algorithms I

Session Chair: Huaxi Gu

A Virtual Machine Placement Algorithm Combining NSGA-II and Bin-Packing Heuristic
  Wenting Wei (Xidian University), Kun Wang (Xidian University), Kexin Wang (Xidian University),
  Shengjun Guo (Xidian University), and Huaxi Gu (Xidian University)

New Parallel Algorithms for All Pairwise Computation on Large HPC Clusters
  Tao Tang (University of Technology Sydney), Hao Wu (University of Sydney),
  Wei Bao (University of Sydney), Pengyi Yang (University of Sydney),
  Dong Yuan (University of Sydney), and Bing Bing Zhou (University of Sydney)

A Holistic Stream Partitioning Algorithm for Distributed Stream Processing Systems
  Kejian Li (Shenzhen University), Gang Liu (Shenzhen University), and
  Minhua Lu (Shenzhen University)

Acceleration of Genetic Algorithm on GPU CUDA Platform
  Dylan Matthew Janssen (Griffith University) and Alan Wee-Chung Liew (Griffith University)

15:30 - 17:10	**Session 2B: High-Performance Scientific Computing**

Session 2B: High-Performance Scientific Computing

Session Chair: Leonel Toledo

Implementing the Matrix Multiplication with DFC on Kunlun Small Scale Computer

  Zheng Du (Tsinghua University), Jing Zhang (Shenzhen University),

  Shihao Sha (Shenzhen University), and Qiuming Luo (Shenzhen University)

Accelerating Conjugate Gradient using OmpSs

  Sandra Catalán (Barcelona Supercomputing Center),

  Xavier Martorell (Universitat Politècnica de Catalunya),

  Jesús Labarta (Universitat Politècnica de Catalunya), Tetsuzo Usui (Fujitsu Limited),

  Leonel Antonio Toledo Díaz (Barcelona Supercomputing Center), and

  Pedro Valero-Lara (Barcelona Supercomputing Center)

Tasking in Accelerators: Performance Evaluation

  Leonel Toledo (Barcelona Supercomputing Center),

  Antonio J. Peña (Barcelona Supercomputing Center),

  Sandra Catalán (Barcelona Supercomputing Center), and

  Pedro Valero-Lara (Barcelona Supercomputing Center)

Adaptive Power Reallocation for Value-Oriented Schedulers in Power-Constrained HPC

  Nirmal Kumbhare (The University of Arizona),

  Aniruddha Marathe (Lawrence Livermore National Laboratory),

  Ali Akoglu (The University of Arizona), Salim Hariri (The University of Arizona), and

  Ghaleb Abdulla (Lawrence Livermore National Laboratory)

Session 2C: Security and Privacy II

Session Chair: Shin Morishima

Research on Differential Privacy for Medical Health Big Data Processing

  Yugu Hu (Guangxi University for Nationalities), Lina Ge (Guangxi University for Nationalities),

  Guifen Zhang (Guangxi University for Nationalities), and

  Donghong Qin (Guangxi University for Nationalities)

Quantifying the Impact of Design Strategies for Big Data Cyber Security Analytics: An Empirical Investigation

  Faheem Ullah (The University of Adelaide) and M. Ali Babar (The University of Adelaide)

A Hybrid Trust Management Model for Secure and Resource Efficient Vehicular Ad hoc Networks

  Adnan Mahmood (Macquarie University), Sarah Ali Siddiqui (Macquarie University),

  Wei Emma Zhang (Macquarie University, The University of Adelaide), and

  Quan Z. Sheng (Macquarie University)

Scalable Anomaly Detection Method for Blockchain Transactions using GPU

  Shin Morishima (Toyama Prefectural University)

Session 2D: Machine Learning and Data Mining I

Session Chair: Can Wang

RNC: Reliable Network Property Classifier Based on Graph Embedding

  Hao Liao (Shenzhen University), Qixin Liu (Shenzhen University),

  Alexandre Vidmer (Shenzhen University), Mingyang Zhou (Shenzhen University), and

  Rui Mao (Shenzhen University)

Optimising Deep Learning Split Deployment for IoT Edge Networks

  Cailen Robertson (Griffith University), Jia Li (Griffith University), Ryoma Ohira (Griffith University),

  Quoc Viet Hung Nguyen (Griffith University), and Jun Jo (Griffith University)

Event Causality Detection in Tweets by Context Word Extension and Neural Networks

  Humayun Kayesh (Griffith University), Md. Saiful Islam (Griffith University), and

	Junhu Wang (Griffith University)
	Imbalanced Data Classification Using Improved Clustering Algorithm and Under-Sampling Method
	Lu Cao (Sun Yat-sen University, Wuyi University) and Hong Shen (University of Adelaide)
18:30 - 20:30	**Dinner Banquet at Novotel Hotel**

Day 2: December 6, 2019 (Friday)	
9:00 - 17:00	**Registration**
10:00 - 11:00	**Keynote Speech 3** **Single Kernel Soft Synchronization Technique to Maximize the Hardware Resource Usage of the GPU** Prof. Koji Nakano, Hiroshima University, Japan
11:00 - 11:20	**Coffee /Tea Break**

11:20 - 12:30	**Parallel Sessions** **Session 3A: Algorithms II**
	Session Chair: Hong Shen
	A Map-Reduce-Based Relation Inference Algorithm for Autonomous System
	   Ting Lv (Guangxi University for Nationalities), Donghong Qin (Guangxi University for Nationalities), Lina Ge (Guangxi University for Nationalities), and Song Wen (Guangxi University for Nationalities)
	A Parallel Uncertain Frequent Itemset Mining Algorithm with Spark
	   Jiaman Ding (Kunming University of Science and Technology),
	   Haibin Li (Kunming University of Science and Technology),
	   Yuanyuan Wang (Australian National University),
	   Lianyin Jia (Kunming University of Science and Technology),
	   Jinguo You (Kunming University of Science and Technology), and
	   Yang Yang (Kunming University of Science and Technology)
	Multi-Thread Concurrent Compression Algorithm for Genomic Big Data
	   Yimu Ji (Nanjing University of Posts and Telecommunications),
	   Shuai Chen (Nanjing University of Posts and Telecommunications),
	   Haichang Yao (Nanjing University of Posts and Telecommunications),
	   Houzhi Fang (Nanjing University of Posts and Telecommunications),
	   Kui Li (Nanjing University of Posts and Telecommunications),
	   Shangdong Liu (Nanjing University of Posts and Telecommunications),
	   Zhengyuan Xie (University of Toronto), and Kairui Wang (University of Liverpool)
	An Improved Online Multidimensional Bin Packing Algorithm
	   Vincent Portella (University of Adelaide) and Hong Shen (University of Adelaide)
	
	Session 3B: Wireless Sensor Networks and Web Security
	Session Chair: Mohsin Murtaza
	Dark Web Along With The Dark Web Marketing And Surveillance
	   Kithmini Godawatte (Charles Sturt University), Mansoor Raza (Charles Sturt University), Mohsin Murtaza (Charles Sturt University), and Ather Saeed (Charles Sturt University)
	An Improved DV-hop Algorithm Based on Iterative Computation and two Communication Ranges for Sensor Network Localization
	   Xu Xiu (China University of Mining and Technology) and

Zhu Changzheng (China University of Mining and Technology)

A Gird-Based Joint Routing and Energy Replenish Scheme for Rechargeable Wireless Sensor Networks

Zhansheng Chen (Beijing Jiaotong University, Beijing Union University,
Guangxi Key laboratory of hybrid computation and IC design analysis)
and Hong Shen (Sun Yat-sen University, University of Adelaide)

Joint Mobile Data Collection and Energy Supply Scheme for Rechargeable Wireless Sensor Networks

Zhansheng Chen (Beijing Jiaotong University, Beijing Union University,
Guangxi Key laboratory of hybrid computation and IC design analysis)
and Hong Shen (Sun Yat-sen University, University of Adelaide)

Session 3C: Distributed Data and Systems

Session Chair: Xiaoying Kong

A Temporal Caching-Aware Dummy Selection Location Algorithm

Xuejiao Mu (University of Adelaide), Hong Shen (University of Adelaide), and
Zhigang Lu (University of Adelaide)

Development of Semantic Model of Multi-Level-Building Navigation Using Indoor Ontology and Dijkstra's Algorithm

Ye Yuan (University of Technology Sydney), Xiaoying Kong (University of Technology Sydney),
Gengfa Fang (University of Technology Sydney), Li Liu (The University of Sydney), and
Sanya Khruahong (Naresuan University)

A Modified Community-Level Diffusion Extraction in Social Network

Huajian Chang (Sun Yat-sen University) and Hong Shen (Sun Yat-sen University)

Overlapping Community Detection of Complex Network: A Survey

Qi Chen (Institute of Information Engineering, CAS) and
Lingwei Wei (Institute of Information Engineering, CAS; School of Cyber Security, UCAS)

Session 3D: Software Systems and Image Processing

Session Chair: Can Wang

Information Management Software Systems for Improving Reliability

Kyaw Zaw Ye (Pyinoolwin Science and Technology Research Center),
Soe Myint Maung (Pyinoolwin Science and Technology Research Center),
Zaw Htet (Pyinoolwin Science and Technology Research Center),
Kyaw Thu Aung (Pyinoolwin Science and Technology Research Center),
Aung Myat Kyaw (Pyinoolwin Science and Technology Research Center),
Pyae Sone Ko Ko (Pyinoolwin Science and Technology Research Center), and
Sithu Thant Zin (Pyinoolwin Science and Technology Research Center)

Image Preprocessing Algorithm Based on K-Means

Xiaofan Zhao (People's Public Security University of China),
Manchun Cai (People's Public Security University of China),
Yuan Ren (People's Public Security University of China), and
Fan Yang (People's Public Security University of China)

Effect of Parallal Processing by Duplicating Histogram in Automatic Image Binarization for High-Level Synthesis

Moena Yamasaki (Kyushu Institute of Technology) and Akira Yamawaki (Kyushu Institute of Technology)

Infinite Propagation Speed for a Two-Component Camassa-Holm Equation

Wenjun Cui (Beijing Jiaotong University) and Yidong Li (Beijing Jiaotong University)

| 12:30 - 13:30 | **Lunch** |

	Parallel Sessions
13:30 - 15:10	**Session 4A: Wireless Networks II** **Session Chair: John Ayoade** **A Timely VANET Multi-hop Routing Method in IoT** *Maede Fotros (Azad University), Mohammad Mansour Riahi Kashani (Azad University),* *Javad Rezazadeh (Kent Institute Australia), and John Ayoade (Kent Institute Australia)* **UltraReliable Communication: Availability Analysis in 5G Cellular Networks** *Yosra Benchaabene (National Engineering Schcool of Gabes),* *Noureddine Boujnah (Faculty of Sciences of Gabes, Tunisia TSSG-Waterford Institute of Technology),* *and Faouzi Zarai (National School of Electronics and Telecommunications of Sfax)* **Adaptive Clustering Strategy Based on Capacity Weight** *Xingchun Liu (Beijing Jiaotong University), Zhipeng Feng (Beijing Jiaotong University),* *Jingjing Yu (Beijing Jiaotong University), Ying Tao (China Academy of Space Technology), and* *Shubo Ren (China Academy of Space Technology)* **D2D-Assisted Computation Offloading for Mobile Edge Computing Systems with Energy Harvesting** *Molin Li (Tianjin University), Tong Chen (Tianjin University), Jiaxin Zeng (Tianjin University),* *Xiaobo Zhou (Tianjin University), Keqiu Li (Tianjin University), and* *Heng Qi (Dalian University of Technology)* **Session 4B: Security and Privacy III** **Session Chair: Mirjana Ivanovic** **An Economical and High-Quality Encryption Scheme for Cloud Servers with GPUs** *Xiongwei Fei (Hunan University), KenLi Li (Hunan Univerisity),* *Shui Yu (University of Technology Sydney), and Keqin Li (State University of New York)* **DOCKERANALYZER: Towards Fine Grained Resource Elasticity for Microservices-Based Applications Deployed with Docker** *Mohamed Hedi Fourati (ReDCAD Laboratory Sfax), Soumaya Marzouk (ReDCAD Laboratory Sfax),* *Khalil Drira (LAAS CNRS), and Mohamed Jmaiel (Digital Research Center)* **CAAVI-RICS Model for Analyzing the Security of Fog Computing Systems: Authentication** *Saša Pesi (University of Novi Sad), Miloš Radovanovi (University of Novi Sad),* *Mirjana Ivanovi (University of Novi Sad), Costin Badica (University of Craiova),* *Milenko Toši (VizLore Labs Foundation), Ognjen Ikovi (VizLore Labs Foundation), and* *Dragan Boškovi (VizLore Labs Foundation)* **Protecting Sensitive Location Visits Against Inference Attacks in Trajectory Publishing** *Xiangyu Liu (Wellington Institute of Technology), Manish Singh (Wellington Institute of Technology),* *and Xiufeng Xia (Shenyang Aerospace University)* **Session 4C: Machine Learning and Data Mining II** **Session Chair: Tatsuya Nonoyama** **Outlier Removal for the Reliable Condition Monitoring of Telecommunication Services** *Günter Fahrnberger (University of Hagen)* **Machine Learning Based Performance Analysis and Prediction of Jobs on a HPC Cluster** *Zhengxiong Hou (Northwestern Polytechnical University),* *Shuxin Zhao (Northwestern Polytechnical University),* *Chao Yin (Northwestern Polytechnical University),* *Yunlan Wang (Northwestern Polytechnical University),* *Jianhua Gu (Northwestern Polytechnical University), and* *Xingshe Zhou (Northwestern Polytechnical University)*

Research on Case Preprocessing Based on Bert-CNN-LSTM Model

   Chuyue Zhang (People's Public Security University of China),

   Manchun Cai (People's Public Security University of China), and

   Xiaofan Zhao (People's Public Security University of China)

Hybrid Model Featuring CNN and LSTM Architecture for Human Activity Recognition on Smartphone Sensor Data

   Samundra Deep (Macquarie University) and Xi Zheng (Macquarie University)

Session 4D: Software Tools I

Session Chair: Akira Yamawaki

The Library for Hadoop Deflate Compression Based on FPGA Accelerator with Load Balance

   Haixin Du (Shenzhen University), Jiankui Zhang (Shenzhen University),

   Shihao Sha (Shenzhen University), Cai Ye (Shenzhen University), and

   Qiuming Luo (Shenzhen University)

Introducing pulseAT: A Tool for Analyzing System Utilization in Distributed Systems

   Uwe Jahn (Dortmund University of Applied Sciences and Arts),

   Vladimir Poliakov (Dortmund University of Applied Sciences and Arts),

   Meghadoot Gardi (Dortmund University of Applied Sciences and Arts),

   Peter Schulz (Dortmund University of Applied Sciences and Arts), and

   Carsten Wolff (Dortmund University of Applied Sciences and Arts)

Development of Filled Circle Drawing in High-Level Synthesis Oriented Game Programming Library

   Yuki Yamagata (Kyushu Institute of Technology) and Akira Yamawaki (Kyushu Institute of Technology)

Modeling Power Consumption of The Code Execution Using Performance Counters Statistics

   Guang Wei (Beihang University), Depei Qian (Beihang University),

   Hailong Yang (Beihang University), and Zhongzhi Luan (Beihang University)

15:10 - 15:30	**Coffee/Tea Break**

<div align="center">Parallel Sessions</div>

Session 5A: Algorithms III

Session Chair: Md. Saiful Islam

Concurrent Failure Recovery for Product Matrix Regenerating Code

   Jingyao Zhang (Here Data Technology)

Scalability of Parareal for Large Power Grid Simulations

   Francis C Joseph (Indian Institute of Science) and Gurunath Gurrala (Indian Institute of Science)

Improving Recommender Systems Accuracy in Social Networks Using Popularity

   Kasra Majbouri Yazdi (Deakin University), Adel Majbouri Yazdi (Kharazmi University),

   Saeed Khodayi (Azad University), Jingyu Hou (Deakin University), and

   Wanlei Zhou (University of Technology Sydney),

   Saeid Saedy (Khavaran Higher Education Institute) and Mehrdad Rostami (University of Kurdistan)

A Distributed Genetic Algorithm with Adaptive Diversity Maintenance for Ordered Problems

   Ryoma Ohira (Griffith University) and Md. Saiful Islam (Griffith University)

Session 5B: Software Systems and Technologies

Session Chair: Wee Lum Tan

A Model Driven-Based Approach for Managing Unanticipated Runtime Adaptation of RTE Systems

   Nissaf Fredj (University of Sousse), Yessine Hadj Kacem (University of Sfax), and

   Mohamed Abid (University of Sfax)

SMT Solvers as Efficient Tools for Automatic Time Properties Verification of Security Protocols

15:30 - 17:10

Agnieszka M. Zbrzezny (University of Warmia and Mazury in Olsztyn),

Olga Siedlecka-Lamch (Czestochowa University of Technology),

Sabina Szymoniak (Czestochowa University of Technology), and

Mirosław Kurkowski (Cardinal St. Wyszynski University)

A Scalable Parallel Computing Framework for Large-Scale Astrophysical Fluid Dynamics Numerical Simulation

Igor Kulikov (ICMMG SB RAS), Igor Chernykh (ICMMG SB RAS), and

Andrei Tchernykh (CICESE Research Center)

TrustZone for Supervised Asymmetric Multiprocessing Systems

Mahdi Amiri-Kordestani (University of Otago), David Eyers (University of Otago),

Zhiyi Huang (University of Otago), and Morteza Biglari-Abhari (University of Auckland)

Session 5C: Quantum Computing

Session Chair: Georg Hahn

Fault-Tolerant Logical Hadamard Gates Implementation in Reed-Muller Quantum Codes

DongXiao Quan (Xidian University), Li Niu (Xidian University), LiLi Zhu (Xidian University),

and ChangXing Pei (Xidian University)

Efficient Fault-Tolerant Syndrome Measurement of Quantum Error-Correcting Codes Based on "Flag"

QiFei Wei (Xidian University), DongXiao Quan (Xidian University), Jing Liu (Xidian University),

and ChangXing Pei (Xidian University)

Faithful Multi-Hop Qubit Transmission Based on GHZ States

Na Chen (Shandong University of Science and Technology),

Bin Yan (Shandong University of Science and Technology),

Shuangshuang Shuai (Shandong University of Science and Technology), and

Changxing Pei (Xidian University)

Peering Into the Anneal Process of a Quantum Annealer

Elijah Pelofske (Los Alamos National Laboratory), Georg Hahn (Harvard University), and

Hristo Djidjev (Los Alamos National Laboratory)

Session 5D: Image Processing

Session Chair: Quoc-Viet Tran

Right Ventricle Segmentation of Cine MRI Using Residual U-net Convolutinal Networks

Zexiong Liu (Shenzhen University), Yuhong Feng (Shenzhen University),

and Xuan Yang (Shenzhen University)

Color Distortion Removal for Heart Rate Monitoring in Fitness Scenario

Quoc-Viet Tran (National Taiwan University of Science and Technology),

Shun-Feng Su (National Taiwan University of Science and Technology),

and Minh-Quang Tran (National Taiwan University of Science and Technology)

Automated Segmentation of Substantia Nigra and Red Nucleus in Quantitative Susceptibility Mapping Images

Dibash Basukala (University of Canterbury), Ramakrishnan Mukundan (University of Canterbury),

Tracy Melzer (University of Otago), and Anthony Lim (University of Otago)

19:30 - 21:00	**Dinner at Australia Outback Spectacular (coach leaves at 18:10 from Novotel Hotel)**

Day 3: December 7, 2019 (Saturday)	
9:00 - 13:00	**Registration**
10:00 - 11:00	**Keynote Speech 4** **HPC, Big Data, and Machine Learning Convergence** Prof. Geoffrey Fox, Indiana University, USA
11:00 - 11:20	**Coffee /Tea Break**

11:20 – 13:00	**Parallel Sessions**
	Session 6A: Software Tools II
	Session Chair: Hiroyuki Takizawa
	An OpenCL-Like Offload Programming Framework for SX-Aurora TSUBASA
	  Hiroyuki Takizawa (Tohoku University), Shinji Shiotsuki (Tohoku University),
	  Naoki Ebata (Tohoku University), and Ryusuke Egawa (Tohoku University)
	A CloudSim-Extension for Simulating Distributed Functions-as-a-Service
	  Hongseok Jeon (Electronics and Telecommunications Research Institute),
	  Chunglae Cho (Electronics and Telecommunications Research Institute),
	  Seungjae Shin (Electronics and Telecommunications Research Institute),
	  and Seunghyun Yoon (Electronics and Telecommunications Research Institute)
	New List Skeletons for the Python Skeleton Library
	  Frédéric Loulergue (Northern Arizona University) and
	  Jolan Philippe (Northern Arizona University, Flagstaff, IMT Atlantique)
	Reachability in Multithreaded Programs Is Polynomial in the Number of Threads
	  Alexander Malkis (Technical University of Munich)
	
	Session 6B: Distributed Systems
	Session Chair: M.Reza Hoseinyfarahabady
	Disk Throughput Controller for Cloud Data-Centers
	  M.Reza Hoseinyfarahabady (The University of Sydney), Zahir Tari (RMIT University), and
	  Albert Y. Zomaya (The University of Sydney)
	Low Computational Data Fusion Approach Using INS and UWB for UAV Navigation Tasks in GPS-Denied Environments
	  Xiaoying Kong (University of Technology Sydney), Gengfa Fang (University of Technology Sydney),
	  Li Liu (The University of Sydney), and Tich Phuoc Tran (UNSW Canberra)
	NFV Optimization Algorithm for Shortest Path and Service Function Assignment
	  Arvind Kalyan (Westview High School)
	An Improved MCB Localization Algorithm Based on Received Signal Strength Indicator
	  Yan Qiao (Beijing Jiaotong University), Zhou Chunyue (Beijing Jiaotong University),
	  Zhong Baitong (Hangzhou Uniview), and Tian Hui (Griffith University)
	
	Session 6C: Machine Learning and Data Mining III
	Session Chair: Hui Tian
	Succinct Representations in Collaborative Filtering: A Case Study using Wavelet Tree on 1,000 Cores
	  Xiangjun Peng (University of Nottingham Ningbo China),
	  Qingfeng Wang (University of Nottingham Ningbo China),
	  Xu Sun (University of Nottingham Ningbo China),
	  Chunye Gong (National University of Defense Technology), and
	  Yaohua Wang (National University of Defense Technology)
	Comparison of Binary Rain Prediction on HIMAWARI using MPI and CUDA

Aisya Nafiisyanti (Western Michigan University, National Institute of Aeronautic and Space)

Attention-Based Supply-Demand Prediction for Autonomous Vehicles

Zikai Zhang (Beijing Jiaotong University), Hairong Dong (Beijing Jiaotong University),

Yidong Li (Beijing Jiaotong University), Yizhe You (Beijing Jiaotong University), and

Fengping Zhao (Beijing Jiaotong University)

In the Quest of Trade-off between Job Parallelism and Throughput in Hadoop: A Stochastic Learning Approach for Parameter Tuning on the Fly

Ramesh Pokhrel (Oslo Metropolitan University), Ashish Rauniyar (University of Oslo), and

Anis Yazidi (Oslo Metropolitan University)

Session 6D: Intelligent Computing

Session Chair: Dian Zhang

Fengyun-4A Meteorological Satellite Data Service System

Yonggang Qi (China Meteorological Administration),

Jiashen Zhang (China Meteorological Administration),

Zhe Xu (China Meteorological Administration), and Di Xian (China Meteorological Administration)

Dynamic Pipelining for The Loosely-Coupled Distributed Constraint Satisfaction Problems

Chun Chen (Chinese Academy of Sciences, University of Chinese Academy of Sciences),

Li Ning (Chinese Academy of Sciences), Yong Zhang (Chinese Academy of Sciences), and

Shengzhong Feng (National Supercomputing Center in Shenzhen)

Logistics Scheduling for UAV Based on Tabu Search Algorithm

Ke Zhao (Nanjing University of Posts and Telecommunications),

Shoubao Su (Jinling Institute of Technology),

Haiping Huang (Nanjing University of Posts and Telecommunications), and

Jie Zhu (Nanjing University of Posts and Telecommunications)

Blockchain Consensus Algorithm Design Based on Consistent Hash Algorithm

Jian Yang (Sun Yet-sen University) and Hong Shen (Sun Yet-sen University)

13:00 - 14:00	**Lunch**