2019 IEEE Industry Summit on Future Technologies for Smart Cities

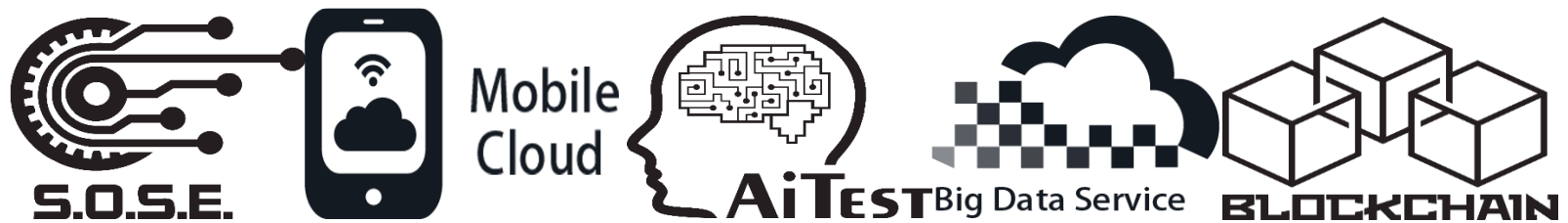San Francisco East Bay, California, USA    April 4-9, 2019

**IEEE Joint International Conferences and Workshops**

**IEEE SOSE2019/BigDataService2019/MobileCloud2019/AiTest2019/DAPPCON2019**

**IEEE Industry Summit on Future Technology for Smart Cities**

- **IOT, BigData, BlockChain and AI & Machine Learning**

**Location: DoubleTree by Hilton Newark Fremont, 39900 Balentine Drive, Newark, CA, 94560**

S.O.S.E.

Mobile Cloud

AiTest Big Data Service

BLOCKCHAIN

Sponsors:

IEEE IEEE computer society

IBM

EduCoder.NET

QuarkChain

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# 2019 IEEE Joint Conferences and Workshops

**Thirteenth IEEE International Conference on Service-Oriented System Engineering (IEEE SOSE2019)**

**The Fifth IEEE International Conference on Big Data Service and Applications (IEEE BigDataService 2019)**

**The 7th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE MobileCloud 2019)**

**The First IEEE International Conference on Artificial Intelligence Testing (IEEE AITest 2019)**

**IEEE International Conference on Decentralized Applications and Infrastructures (DAPPCON 2019)**

**2019 IEEE Industry Summit on Future Technology for Smart Cities - IOT, BigData, BlockChain and AI & Machine Learning**

**IEEE International Workshop on Medical and Healthcare Using Big Data Technologies (MHBDT 2019)**

**IEEE International Workshop on Big Data in Water Resources, Environment, and Hydraulic Engineering**

**(IEEE BigData WREHE 2019)**

**IEEE International Workshop of Security and Trust in Mobile Network (IEEE SeTM 2019)**

**IEEE International Workshop On Joint Cloud Computing (IEEE JCC 2019)**

**IEEE International Workshop On Cloud & Edge Computing in Robotics Systems (IEEE CCR 2019)**

**(Friday) April 5, 2019**          **IEEE Big Data WREHE / IEEE JCC / IEEE CCR /IEEE SeTM /BlockChain Tutorial**

| | | | | | | |
|---|---|---|---|---|---|---|
| 8:00am – 5:00am | IEEE Joint Conference and Workshop Registration | | | | | |
| 7:30am-9:00am | Breakfast | | | | | |
| 8:50am -9:35am | Keynote Section #1 Speaker: Marianne Huchard, Professor, University of Montpellie, France (Ballroom 3 and 4)<br>Topic: Formal Concept Analysis, A framework for Knowledge Structuring and Exploration.<br>- Applications to Component/Service Directories and Product Lines | | | | | **Technology & Solution Exhibition (Courtyard Ballroom)** |
| 9:35am - 9:45am | Break | | | | | |
| Room Allocation | IEEE Bigdata WREHE Workshop **(Ballroom 1A)** | IEEE JCC Workshop **(Ballroom 3 and 4)** | IEEE JCC Workshop IEEE CCR Workshop **(Ballroom 1C)** | BlockChain Tutorial **(Seminar 3)** | IEEE SeTM Workshop **(Ballroom 1B)** | |
| 9:45am -11:00am | Workshop Section 1 | IEEE JCC Workshop Section 1 | IEEE JCC Workshop Section 1 | BlockChain Tutorial Section 1 | IEEE SeTM Workshop Section 1 | |
| 11:00am-11:15am | Tea Break | | | | | |
| 11:15am-12:30pm | WREHE Workshop Section 2 | IEEE JCC Workshop Section 2 | IEEE JCC Workshop Section 2 | BlockChain Tutorial Section 2 | | |
| 12:30pm-2:30pm | Lunch | | | | | |
| 2:15pm -3:30pm | WREHE Workshop Section 3 | IEEE JCC Workshop Section 3 | IEEE CCR Workshop Section 3 | BlockChain Tutorial Section 3 | | |
| 3:30pm -3:45pm | Tea Break | | | | | |
| 3:45pm -5:30pm | WREHE Workshop Section 4 | IEEE JCC Workshop Section 4 | IEEE CCR Workshop Section 4 | BlockChain Tutorial Section 4 | | |
| 6:30pm-7:00pm | Large Group Photo Session I (Courtyard) | | | | | |
| 6:30pm-8:30pm | Conference Reception (Free with one Reception Ticket) | | | | | |
| 8:30pm-10:30pm | Joint Conference Planning Meeting I (Seminar II) | | | | | |

**Optional tours are available. Please check the conference websites.**

## (Saturday) April 6, 2019, IEEE Industry Summit on Future Technology for Smart Cities

## - IOT, Big Data, AI, and Blockchain

| Time | | | | |
|---|---|---|---|---|
| 8:30am -5:30pm | Joint Summit and Conference Registration | | | |
| 7:30am – 8:30am | Breakfast | | | |
| 8:30am-8:50am | **Conference Opening Session (Grant Ballroom 2, 3, and 4)** | | | **Technology & Solution Exhibition (Courtyard Ballroom)** |
| 8:50am-9:30am | **Industry Summit Opening Session (Grant Ballroom 2, 3, and 4)** | | | |
| 9:30am-11:00am | **Smart City for Tomorrow** | | | |
| 11:00am-11:10am | **Tea Break** | | | |
| 11:10am-12:30pm | **Smart City and Big Data** | | | |
| 12:30pm-1:30pm | Lunch | | | |
| Room Allocation | Smart City Track (Grand Ballroom 2) | Blockchain Track (Grand Ballroom 3) | AI & Machine Learning Track (Grand Ballroom 4) | **Technology & Solution Exhibition (Courtyard Ballroom)** |
| 1:30pm -3:30pm | Smart City Challenges and Opportunities in Southern California | Blockchain Technologies | AI and Machine Learning | |
| 3:30pm-3:45pm | Tea Break | | | |
| 3:45pm-4:45pm | Building Sustainable Smart City Solutions | Panel Discussion Blockchain for Tomorrow | Tomorrow AI and Machine Learning | **Technology & Solution Exhibition (Courtyard Ballroom)** |
| 4:45pm -6:00pm | Innovative Smart City Solutions | Blockchain Industry and Practice | AI Industry | |
| 6:15pm-7:00pm | VIP Shuttle to VIP Dinner (Free with one VIP Ticket) | | | |
| 7:00pm-9:00pm | VIP Dinner (Free with one VIP Ticket) | | | |
| 8:00am-5:00pm | VIP Room (for VIP Speakers) | | | |

## (Sunday) April 7,2019    IEEE Big Data Service/DAPPCON /MobileCloud/SOSE/AITest Conferences

| 7:30am-8:50am | **Breakfast** | | | | | |
|---|---|---|---|---|---|---|
| 8:00am-5:00pm | **IEEE Joint Conference and Workshop Registration** | | | | | |
| Room Allocation | IEEE BigData Service (Ballroom 3) | IEEE DAPPCON (Ballroom 1A) | IEEE MobileCloud (Ballroom 1B) | IEEE SOSE (Ballroom 1C) | IEEE AITest (Ballroom 4) | **QuarkChain's Training** on Blockchain Future Challenges and Solutions (Seminar 3) |
| 8:50am-9:35am | **Joint Conference Keynote Session #1 (Ballroom 3 and Ballroom 4)** <br> **Speaker: Taghi M. Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab.** <br> **Topic: Machine Learning, Big Data and Artificial Intelligence** | | | | | |
| 9:35am-9:45am | **Break** | | | | | |
| 9:45am-11:00am | Section 1 Big Data Algorithms and Analysis | Session 1 Blockhain Protocols | Session 1 Mobile Edge Computing | Session 1 IOT: Quality of Data and Edge Computing | Session 1 Fault Localization and Anomaly Detection | **QuarkChain's** Training Session 1 Blockchain Future Challenges |
| 11:00am-11:15am | **Tea Break** | | | | | |
| 11:15am-12:30am | Section 2 Big Data Processing and Platform | IEEE DAPPCON Session 2 Applications | IEEE MobileCloud Session 2 Mobile Cloud and networking | IEEE SOSE Session 2 AI For Design and Quality of Services | IEEE AITest Session 2 (Ballroom 4) Test Cases and Neural Network | Session 2 Blockchain Future Issues and Solutions |
| 12:30pm-1:30pm | **Lunch** | | | | | |

# (Sunday) April 7,2019 - IEEE BigDataService/DAPPCON/MobileCloud/SOSE/AITest Conferences

| 1:30pm-2:15pm | Joint Conference Keynote Section #2 (Ballroom 3 and Ballroom 4) | | | | | |
|---|---|---|---|---|---|---|
| | Speaker: Divyesh Jadav, Manager in Cloud, IoT & Systems Lifecycle Analytics, IBM Research | | | | | |
| | Topic: From Blocks to Structures: Blockchain in the Enterprise | | | | | |
| Room Allocation | **IEEE BigData Service (Ballroom 3)** | **IEEE DAPPCON (Ballroom 1A)** | **IEEE MobileCloud (Ballroom 1B)** | **IEEE SOSE (Ballroom 1C)** | **IEEE AITest (Ballroom 4)** | |
| 2:15pm-3:30pm | Section 3 Big Data Services and Applications I | Session 3 Smart Contracts & Analytics | Session 3 Mobile Cloud and applications | Session 3 Micro Services | Session 3 Automated Testing and AI | |
| 3:30pm -3:45pm | **Tea Break** | | | | | |
| 3:45pm -4:30pm | Shared Panel Session #1     Panel Title: Big Data Computing and Service for Tomorrow (Ballroom 3 and Ballroom 4) | | | | | |
| | Moderator: Taghi Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab. | | | | | |
| | Panelists: Paul Townend, Deng Li, Fan-Jing Meng, W. T. Tsai | | | | | |
| 4:30pm-4:45pm | **Break** | | | | | |
| 4:45pm-6:00pm | Section 4 Big Data Services and Applications II | Session 4 Identity & Token Economy | Session 4 Resource Managements on Mobile Cloud | Session 4 Algorithms for Specific Service and Engineering | Session 4 Testing for DNNs | |
| 6:00pm-6:30pm | **Joint Conference and Workshop Phot Session II** | | | | | |
| 7:30pm-9:30pm | **Joint Conference Banquet (Free with one Banquet Ticket)** | | | | | |

# (Monday) April 8,2019 - IEEE BigDataService/DAPPCON/MobileCloud/MHBDT/SOSE/AITest Conferences

| 7:30am-8:50am | Breakfast | | | | |
|---|---|---|---|---|---|
| 8:00am-5:00pm | IEEE Joint Conference and Workshop Registration | | | | |
| 8:50am-9:35am | Joint Conference Keynote Section #3 (Ballroom 3 and Ballroom 4)<br>Speaker: Franz Wotawa, Professor, Graz University of Technology, Austria<br>Topic: AI-Based AI Testing | | | | |
| 9:35am-9:45am | Break | | | | |
| Room Allocation | IEEE BigData Service (Ballroom 3) | IEEE DAPPCON (Ballroom 1A) | IEEE MobileCloud (Ballroom 1B) | IEEE SOSE (Ballroom 1C) | IEEE AI Testing (Ballroom 4) |
| 9:45am-11:00am | IEEE BigData Service Section 5 Big Data and Analytics for Healthcare | IEEE DAPPCON Section 5 Short Papers I: Blockchain Protocols | IEEE MobileCloud Session 5 | Section 5 Work-in-Progress I | Session 5 AI Testing |
| 11:00am-11:15am | Tea Break | | | | |
| 11:15am-12:30am | IEEE BigData Service Section 6 Big Data Recommendation | IEEE DAPPCON Section 6 Short Papers II: Applications I | IEEE MHBDT Workshop Session 3 Modeling and Analytics on Precision Medicine | IEEE SOSE Section 6 Edge and Fog Computing | IEEE AITest Session 6 Machine Learning and Clustering Algorithm |
| 12:30pm-1:30pm | Lunch | | | | |

## (Monday) April 8,2019    IEEE BigDataService/DAPPCON/MobileCloud/MHBDT Workshop/SOSE/AITest Conferences

| 1:30pm-2:15pm | Joint Conference Keynote Section #4 (Ballroom 3 and Ballroom 4) Speaker: Fan-Jing Meng, IBM Research, China Session Chair: Guido Wirtz, University of Bamberg, Germany | | | | |
|---|---|---|---|---|---|
| Room Allocation | IEEE BigData Service (Ballroom 3) | IEEE DAPPCON (Ballroom 1A) | IEEE MHBDT Workshop (Ballroom 1B) | IEEE SOSE (Ballroom 1C) | IEEE AiTest (Ballroom 4) |
| 2:15pm-3:30pm | Section 7 Big Data Real-time Analysis *& Security | Section7 Short Papers III: Applications II | Session 4 Classification on Precision Medicine | Section 7 Work-In-Progress II | Special Track 1 AI in Security Testing |
| 3:30pm -3:45pm | Tea Break | | | | |
| 3:45pm -4:30pm | Shared Panel Session #2    Panel Title: Ai Testing and Automation – Issues, Challenges, and Needs Moderator: Marc Roper, Panelists: Jerry Gao, Hong Zhu, Franz Wotawa, George Zhou | | | | |
| 4:30pm-4:45pm | Break | | | | |
| 4:45pm-6:00pm | Section 8 Semantic-based Data Analysis | Section 8 Short Papers IV: Smart Contracts | Session 5 New Approaches on Precision Medicine | Section 8 Blockchain System Design and Engineering | Special Track 2 Constraint Solvers in Software Testing, Verification and Analysis |
| 6:00pm-7:30pm | Dinner Break | | | | |
| 7:30pm-9:30pm | Joint Conference Organization Planning Meeting II (VIP Room) | | | | |

# (Tuesday) April 9,2019    IEEE BigDataService/ IEEE SOSE/ IEEE AITest/ IEEE Medical MHBDT Workshop

| 7:30am-8:50am | **Breakfast** | | | |
|---|---|---|---|---|
| 8:00am-11:30am | IEEE Joint Conference and Workshop Registration | | | |
| **8:50am -9:35am** | **Joint Conference Keynote Session #5 (Ballroom 3 and Ballroom 4)**<br>**Speaker: George Zhou, University of Wollongong, Australia**<br>**Topic: Automated testing of real-life self-driving systems and beyond** | | | |
| Room Allocation | IEEE BigData Service<br>(Ballroom 3 & 4) | IEEE SOSE<br>(Ballroom 1A) | IEEE AITest<br>(Ballroom 1B) | **IEEE MHBDT Workshop**<br>**(Ballroom 1C)** |
| 9:35am - 9:45am | **Break** | | | |
| 9:45am -11:00am | IEEE BigData Service<br>Section 9<br>Work In Progress I | IEEE SOSE<br>Section 9<br>Big Data Analytics | IEEE AITest<br>Special Track3<br>AI and Metamorphic Testing | **IEEE MHBDT Workshop**<br>**Section 1**<br>**Deep Learning on Precision Medicine** |
| 11:00am -11:15am | **Tea Break** | | | |
| 11:15am-12:30pm | IEEE BigData Service<br>Invited Paper Session | IEEE SOSE<br>Section 10<br>Cloud Services | IEEE BigData Service<br>Section 10<br>Work In Progress II | **IEEE MHBDT Workshop**<br>**Section 2**<br>**Application on Precision Medicine** |
| 12:30pm-1:30pm | **Lunch** | | | |
| 1:30pm - 8:00pm | **Local Bus Tour (Free with One Tour Ticket)** | | | |

# Conference Hotel Map

## DoubleTree By Hilton Newark Fremont, 39900 Balentine Drive, Newark, CA, 94560, US



Property Map

Elevator
Exit
Ice & Vending

DoubleTree by Hilton Newark-Fremont | 39900 Balentine Drive | Newark, CA 94560 | (510) 490-8390

# Hotel Conference Meeting Space – Floor Map
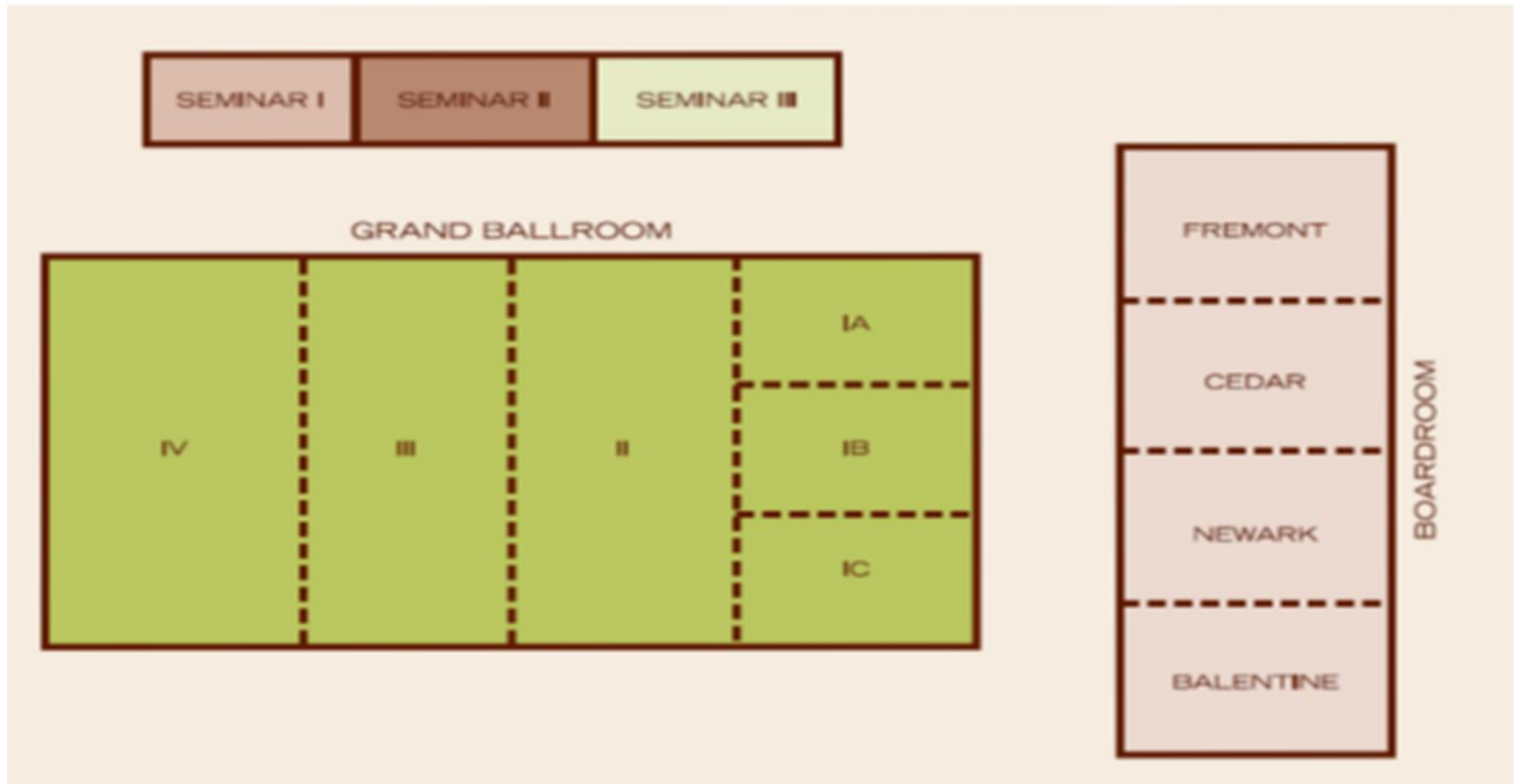
# Exhibition Floor Map for Smart Technology and Solutions in

## - IOT, BlockChain and AI & Machine Learning

**Boardroom**

Fremont          Cedar          Newark          Balentine

- telephone
- data
- electrical outlet
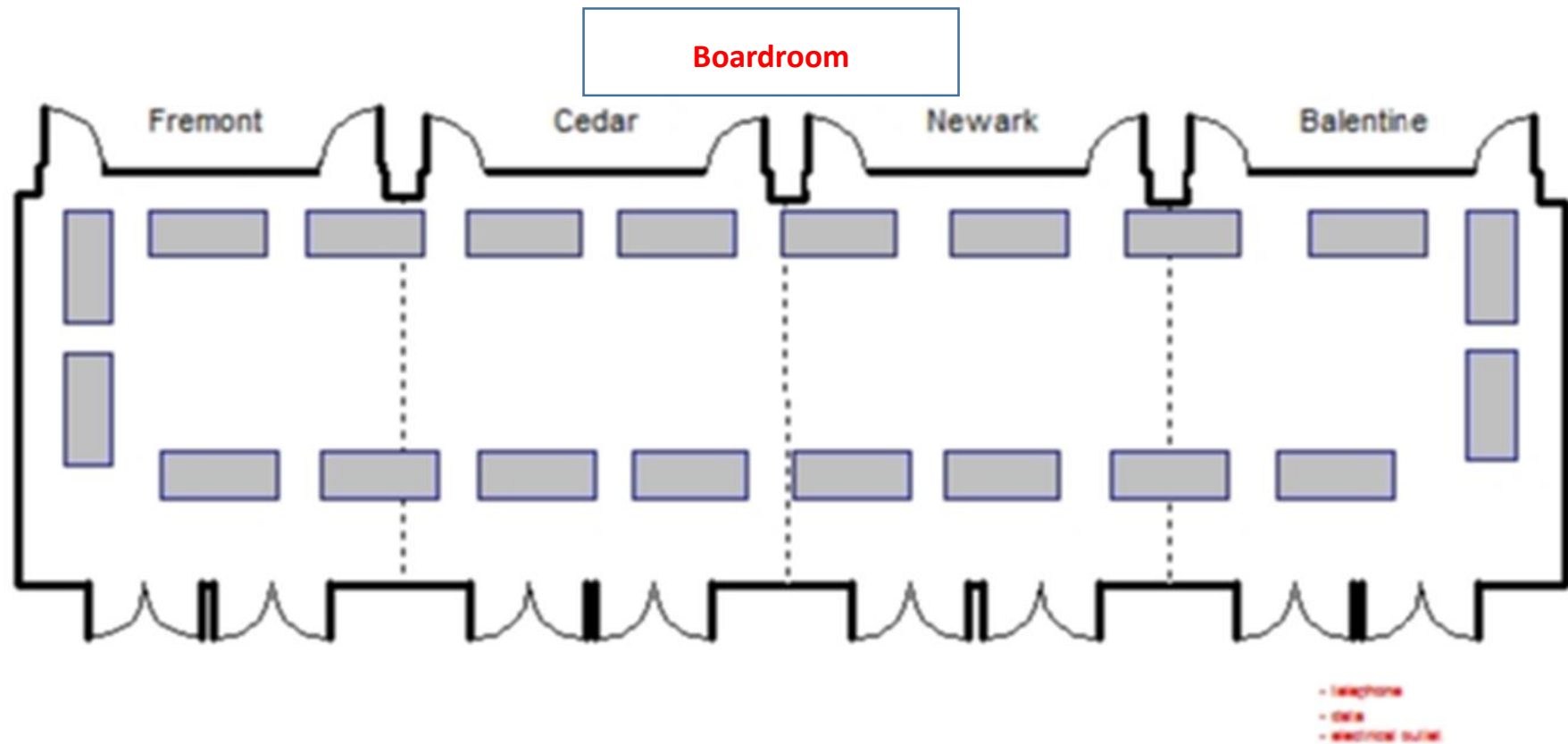
# Room Allocations for IEEE Joint International Conferences, Workshops, Training and Tutorials

| Room | Date | Conference/Workshop | IEEE Joint International Conferences, Workshops, and Tutorials |
|---|---|---|---|
| Grand Ballroom 3 & 4 | 4/5 – 4/9/2019 | | Joint Conferences/Workshops - Share Keynote Sessions |
| Grand Ballroom 1A | 4/5/2019 | Workshop #1: IEEE Bigdata WREHE | 2019 IEEE International Workshop on Big Data in Water Resources, Environment, and Hydraulic Engineering (IEEE Bigdata WREHE) |
| Grand Ballroom 3 & 4 | 4/5/2019 | Workshop #2: IEEE JCC2019 | 2019 IEEE International Workshop On Joint Cloud Computing (IEEE JCC 2019) |
| Grand Ballroom 1B | 4/5/2019 | Workshop #3: IEEE CCR2019 | 2019 IEEE International Workshop On Cloud Computing in Robotic Systems |
| Grand Ballroom 1C | 4/9/2019 | Workshop #4: IEEE MHBDT 2019 | 2019 IEEE International Workshop on Medical, Healthcare, using Big Data Technologies (IEEE MHBDT 2019) |
| Grand Ballroom 1C | 4/5/2019 | Workshop #5: IEEE SeTM | 2019 International Workshop of Security and Trust in Mobile Network |
| Seminar 3 | 4/5/2019 | **Training Tutorial** | Full-Stack Blockchain Development Tutorial (Third-Party Sponsored) |
| Grand Ballroom 2, 3, and 4 | 4/6/2019 | IEEE Industry Summit 2019 | 2019 IEEE International Industry Summit on Future Technologies for Smart Cities |
| Boardroom | 4/5 - 4/6/2019 | Exhibition | Exhibition on Smart City Technologies and Solutions, AI and Block Chain Solutions |
| Grand Ballroom 3 & 4 | 4/7 - 4/9/2019 | IEEE BigdataService 2019 | 2019 IEEE International Conference On Big Data Computing, Service and Applications |
| Ballroom 1B | 4/7 - 4/8/2019 | IEEE DAPPCON 2019 | 2019 IEEE International Conference on Decentralized Applications and Infrastructures |
| Ballroom 1C | 4/7 - 4/8/2019 | IEEE MobileCloud 2019 | 2019 IEEE International Conference on Mobile Cloud Computing, Services, and Engineering |
| Grand Ballroom 1A | 4/7 - 4/9/2019 | IEEE SOSE 2019 | 2019 IEEE International Conference on Service-Oriented System Engineering |
| Grand Ballroom 4 | 4/7 - 4/9/2019 | IEEE AITest 2019 | 2019 IEEE International Conference On Artificial Intelligence Testing and Automation |
| Seminar 3 (Morning) | 4/7/2019 | **Free QuarkChain's Training Workshop** | **QuarkChain'**s training on Blockchain Future Challenges and Solutions |

# Table of Contents

**4/5/2019 - Workshop Day**　　　　　**IEEE BigData WREHE 2019**　　　　　**Location: Grand Ballroom 1A**

## IEEE International Workshop on Big Data in Water Resources, Environment, and Hydraulic Engineering

| 7:30am – 8:50am | Breakfast | |
|---|---|---|
| 8:00am – 5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am -9:35am | Keynote Session | Speaker: Marianne Huchard, Professor, University of Montpellie, France (Ballroom 3 and 4)<br>Topic: Formal Concept Analysis, A framework for Knowledge Structuring and Exploration.<br>　-　Applications to Component/Service Directories and Product Lines |
| | Session Chair | Jie Xu, University of Leeds, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | Session #1 | Session Title: Fusion technology and prediction model |
| | Session Chair | Yingchi Mao |
| | Paper ID:82 | Title: Event Fusion and Decision Approach Based on Node Reliability in Wireless Sensor Networks<br>Authors: Yingchi Mao, Jian Gao and Hai Qi |
| | Paper ID:12 | Title :A Water Level Prediction Model Based on ARIMA-RNN<br>Authors: Guoyan Xu, Yi Cheng, Fan Liu, Ping Ping and Jie Sun |
| | Paper ID:66 | Title: A Centralized Fusion Model and Capacity Fusion Rule for Unmanned Air Vehicle Network<br>Authors: Shufang Xu, Dazhuan Xu, Xuejie Zhang and Longbao Wang |
| 11:00am -11:15am | Tea Break | |
| 11:15am -12:30pm | Session #2 | Session Title: Security Risk Control and Monitoring |
| | Session Chair | Qianmu Li |
| | Paper ID:29 | Title: Security risk control of water power generation industrial control network based on attack and defense map |
| | | Authors: Xiao Dong, Jing Zhang, Qianmu Li, Jun Hou, and Yonzong Liu |

| | | |
|---|---|---|
| | Paper ID:30 | Title: Safety Risk Monitoring of Hydraulic Power Generation Industrial Control Network Based on Ensemble learning Algorithm |
| | | Authors: Shenzhi Chen, Jun Hou, Qianmu Li |
| | Paper ID:31 | Title: Research on Edge Network Active Defense Technology |
| | | Authors: Henrui Zhang, Yong Qi, Qianmu Li, Jun Hou, YonZong Liu |
| 12:30pm-2:00pm | **Lunch** | |
| 2:00pm -3:30pm | Session #3 | Session Title: Mimic Defense and Traffic Analysis |
| | Session Chair | Qianmu Li |
| | Paper ID:34 | Title: Mimic Defense Techniques of Edge-Computing Terminal |
| | | Authors: Xiaonan Sang, Qianmu Li |
| | Paper ID:35 | Title: Network traffic big data prediction model based on combinatorial learning |
| | | Authors: Fei Lui, Qianmu Li, Yaozong Liu |
| | Paper ID:38 | Title: Self-similarity Analysis and Application of Water Network Traffic |
| | | Authors: Yan Xu, Summera Shamrooz, Qianmu Li, Jun Hou |
| 3:30pm -3:45pm | Tea Break | |
| 3:45pm -5:30pm | Session #4 | Session Title: Hydraulic engineering and IOT based technology |
| | Session Chair | Yu Wang |
| | Paper ID:19 | Title: Abnormal Pattern Pre-detection Algorithm Based on Time Series |
| | | Authors: Hao Yang, Yu Wang and Serge Fotso Tagne |
| | Paper ID:20 | Title: Mechanical Identification of Extra Large Hydraulic Engineering Vehicles Based on Video Big Data |
| | | Authors: Shuiqing Wu and Yu Wang |
| | Paper ID:94 | Title: Design and Business Modelling of an IoT based Cost-Efficient Solar Data Logger with Cellular Monitoring Interface for Decentralized Renewables |
| | | Authors: Md Shahrukh Adnan Khan, Md. Khairul Alam, Masum Howlader and Shoaib Mahmud |
| 6:30pm-7:00pm | Large Group Photo Session at Courtyard in DoubleTree Hotel | |

| 6:30pm-8:30pm | Reception at Courtyard in DoubleTree Hotel    (Free with One Reception Ticket) |
|---|---|

## 4/5/2019 – Workshop Day - IEEE SeTM 2019        Location: Grand Ballroom 1B

## IEEE International Workshop of Security and Trust in Mobile Network

| Time | | |
|---|---|---|
| 7:30am-8:50am | Breakfast | |
| 8:00am-5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am -9:35am | Keynote Session | Speaker: Marianne Huchard, Professor, University of Montpellie, France (Ballroom 3 and 4) <br> Topic: Formal Concept Analysis, A framework for Knowledge Structuring and Exploration. <br> - Applications to Component/Service Directories and Product Lines. |
| | Session Chair | Jie Xu, The University of Leeds, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | SeTM -International Workshop of Security and Trust in Mobile Network 2019 | |
| | Session Chair | SATO, Hiroyuki, University of Tokyo, Japan |
| | | Title: Design and Development of an IoT Home Network Monitoring System |
| | | Authors: Garen Kutukian and Mohammad Iftekhar Husain |
| | | Title: Lightweight IoT Group Key Establishment Scheme From the One Time Pad |
| | | Authors: Teklay Gebremichael, Ulf Jennehag and Mikael Gidlund |
| 11:00am-12:30pm | Break | |
| 12:30pm-1:30pm | Lunch | |
| 6:30pm-7:00pm | Large Group Photo Session at Courtyard in DoubleTree Hotel | |
| 6:30pm-8:30pm | Reception at Courtyard in DoubleTree Hotel    (Free with one Reception Ticket) | |

| 4/5/2019 - Workshop Day - IEEE JCC 2019    Location: Grand Ballroom 3 & 4 IEEE International Workshop On Joint Cloud Computing | | |
|---|---|---|
| **8:00am – 5:00pm** | IEEE Joint Conference Registration | |
| **8:50am -9:35am** | Keynote Session | Speaker: Marianne Huchard, Professor, University of Montpellie, France (Ballroom 3 and 4) Topic: Formal Concept Analysis, A framework for Knowledge Structuring and Exploration. <br> -    Applications to Component/Service Directories and Product Lines |
| | Session Chair: | Jie Xu, University of Leeds, UK |
| **9:35am - 9:45am** | Break | |
| **9:45am -11:00am** | Session #1 | Joint Cloud Computing I |
| | Session Chair: | Donggang Cao |
| | Paper ID: JCC-5 | Title: Comparison between Chunk-based and Layer-based Container Image Storage Approaches: an Empirical Study <br> Authors: Yan Li, Bo An, Junming Ma and Donggang Cao |
| | Paper ID: JCC-26 | Title: Looking Into Online Gaming From Measurement Perspective <br> Authors: Kai Yang, Xu Zhang, Yangchao Zhao, Qilin Fan, Qin Gao, Yongqiang Lyu, Hao Yin and Zhan Ma. |
| | Paper ID: JCC-15 | Title: SDVisor: Secure Debug Enclave with Hypervisor <br> Authors: Zhen Hong, Zinan Li and Yubin Xia |
| | Paper ID: JCC-9 | Title: GPU Scheduling for Short Tasks in Private Cloud <br> Authors: Jialun Shao, Junming Ma, Yan Li, Bo An and Donggang Cao |
| **11:00am - 11:15am** | Tea Break | |
| **11:15am - 12:30pm** | Session #2 | Joint Cloud Computing II |
| | Session Chair | Wei Zhang |

| | Paper ID: JCC-19 | Title: SysOptic: a Fine-Grained Monitoring System for Virtual Machines Based on PMU |
|---|---|---|
| | | Authors: Pin Liu, Renyu Yang, Jie Sun, Xudong Liu |
| | Paper ID: JCC-16 | Title: Efficient rendering of large-scale CAD models on a GPU virtualization architecture with model geometry metrics |
| | | Authors: Junjie Xue, Xiang Zhai and Huiyang Qu |
| | Paper ID: JCC-12 | Title: Undertow: An Intra-Kernel Isolation Mechanism for Hardware-Assisted Virtual Machines |
| | | Authors: Zihan Yang, Zeyu Mi and Yubin Xia |
| **12:30pm-1:30pm** | **Lunch** | |
| **2:15pm -3:30pm** | Session #3 | Joint Cloud Computing III |
| | Session Chair | Haibo MI |
| | Paper ID: JCC-25 | Title: Caching Salon: From Classical to Learning-Based Approaches<br>Authors: Yangchao Zhao, Xu Zhang, Kai Yang, Qilin Fan, Dongchao Guo, Yongqiang Lyu, Hao Yin and Zhan Ma |
| | Paper ID: JCC-3 | Title: Mixup Based Privacy Preserving Mixed Collaboration Learning<br>Authors: Yingwei Fu, Huaimin Wang, Kele Xu and Haibo Mi |
| | Paper ID: JCC-14 | Title: Resource Reservation and Request Routing for a Cloud-Based Content Delivery Network<br>Authors: Qilin Fan, Hao Yin, Yuming Jiang, Yongqiang Lyu, Sen Wang, Haojun Huang and Xu Zhang |
| | Paper ID: JCC-18 | Title: BSP-Based Strongly Connected Component Algorithm in Joint Cloud Computing<br>Authors: Xiaochen Sun, Xingtong Ye, Kai Kang, Lijie Xu and Wei Wang |
| **3:30pm -3:45pm** | **Tea Break** | |
| **3:45pm -5:30pm** | Session #4 | Joint Cloud Computing IV |
| | Session Chair | Zexun Jiang |
| | Paper ID: JCC-4 | Title: Detecting ``Pump & Dump Schemes'' on Cryptocurrency Market Using an Improved Apriori Algorithm<br>Authors: Weili Chen, Yuejin Xu, Zibin Zheng, Yuren Zhou and Jianxun Eileen Yang |
| | Paper ID: JCC-8 | Title: Shaready: a Resource-Isolated Workload Co-location System<br>Authors: Shiqing Xue, Chunming Hu, Jianyong Zhu and Renyu Yang |

| | Paper ID: JCC-6 | Title: SD-P2: a Novel Software Defined Public Internet Infrastructure for Joint Cloud Computing |
|---|---|---|
| | | Authors: Daochao Huang, Shijun Shen and Xinran Liu |
| | Paper ID: JCC-20 | Title: Wukong: Heuristic-based Framework for Generating Generic-API for JointCloud |
| | | Authors: Heng Wu, Yuanjia Xu, Shijun Qin, Yuewen Wu and Haijun Li |
| 6:30pm-7:00pm | Large Group Photo Session at Courtyard in DoubleTree Hotel | |
| 6:30pm-8:30pm | Reception at Courtyard in DoubleTree Hotel (Free with one Reception Ticket) | |

| 4/5/2019 - Workshop　　　　　　IEEE JCC and IEEE CCR 2019　　　　　　Location: Grand Ballroom 1C<br>IEEE International Workshop On Joint Cloud Computing 2019/Cloud/Edge Computing in Robotic Systems 2019 | | |
|---|---|---|
| 8:00am -5:00pm | IEEE Joint Conference Registration | |
| 8:50am -9:35am | Keynote Session | Speaker: Marianne Huchard, Professor, University of Montpellie, France |
| | | Topic: Formal Concept Analysis, A framework for Knowledge Structuring and Exploration. |
| | | - Applications to Component/Service Directories and Product Lines |
| | Session Chair | Jie Xu, University of Leeds, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | Session #1 | Cloud & Edge Computing In Robotic Systems Session (CCR) |
| | Session Chair | Peichang Shi |
| | Paper ID: JCC-1 | Title: LS4BUCC: A Low Overhead Storage Architecture for Blockchain Based Unmanned Collaborative Cognition System |
| | | Authors: Xunhui Zhang, Huaimin Wang, Peichang Shi and Xiang Fu |
| | Paper ID: JCC-2 | Title: Joint Cloud Collaboration Mechanism between Vehicle Clouds Based on Blockchain |
| | | Authors: Kai Yang, Xu Zhang, Yangchao Zhao, Qilin Fan, Qin Gao, Yongqiang Lyu, Hao Yin and Zhan Ma. |
| | Paper ID: JCC-22 | Title: EtherShare: Share Information in JointCloud Environment Using Blockchain-based Smart Contracts |
| | | Authors: Zhen Hong, Zinan Li and Yubin Xia |

| | Paper ID: JCC-13 | Title: Research on Key Technologies of Software-Defined Network Based on Blockchain |
|---|---|---|
| | | Authors: Jialun Shao, Junming Ma, Yan Li, Bo An and Donggang Cao |
| 11:00am -11:15am | Tea Break | |
| 11:15am -12:30pm | Session #2 | Cloud & Edge Computing in Robotic Systems (CCR) |
| | Session Chair | Bo Ding |
| | Paper ID: CCR-13 | Paper Title: Cloud Robotics Architecture: From Theory to Practices |
| | | Authors: Huaxi Yulin Zhang, Lei Zhang |
| | Paper ID: CCR-6 | Paper Title: Enabling Adaptive Intelligence in Cloud-augmented Multiple Robots Systems |
| | | Authors: Shieng Zhang, Yinggang Li, Bo Liu, Shupo Fu |
| | Paper ID: JCC-10 | Paper Title: An Emergency-Oriented Backpressure Scheduling Scheme for Internet of Vehicles |
| | | Authors: Lishi Mei, Ning Xu and Bo Yin |
| 12:30pm-1:30pm | Lunch | |
| 2:15pm -3:30pm | Session #3 | Cloud & Edge Computing In Robotic Systems Session (CCR) |
| | Session Chair | Shigeng Zhang |
| | Paper ID: CCR-16 | Paper Title: Enabling Autonomous Unmanned Aerial Systems via Edge Computing |
| | | Authors: Kaikai Liu, Shivam Chauhan, Revathy Devaraj, Sneha Shahi, Unnikrishnan Sreekumar |
| | Paper ID: CCR-11 | Paper Title: Multi-Objective Path Planning for UAV in the Urban Environment Based on NSGA-II |
| | | Authors: Qian Ren, Yuan Yao, Gang Yang, Xingshe Zhou |
| | Paper ID: CCR-12 | Paper Title: Multi-Region Coverage Path Planning for Heterogeneous Unmanned Aerial Vehicles Systems |
| | | Authors:Jinchao Chen, Chenglie Du, Xu Lu, Keke Chen |
| | Paper ID: CCR-1 | Paper Title: Decentralized Velocity-Aware Motion Planning for Multi-agent Coordination |
| | | Authors: Yujiao Hu, Xingshe Zhou, Yuan Yao |
| 3:30pm -3:45pm | Tea Break | |
| 3:45pm -5:30pm | Session #4 | Cloud & Edge Computing In Robotic Systems Session (CCR) |
| | Session Chair | Dawei Feng |

| | Paper ID: CCR-15 | Paper Title: Policy-based Access Control for Robotic Applications |
|---|---|---|
| | | Authors: Yi Zong, Yao Guo and Xiangqun Chen |
| | Paper ID: CCR-7 | A Multi-task Scheduling Algorithm for Cloud Robots |
| | | Authors: Yukai Wang, Wenjie Tang and Siqi Xiong |
| | Paper ID: CCR-5 | Paper Title: Learning to Communicate Efficiently with Group Division in Decentralized Multi-Agent Cooperation |
| | | Authors: Shuqi Liu, Mingyang Geng, Kele Xu |
| | Paper ID: CCR-3 | Paper Title: Combine Synchronous Method with Experience Replay Memory for Independent Q-Learning in Multi-Agent Deep Reinforcement Learning |
| | | Authors: Xudong Gong, Bo Ding, Jie Xu, Huaimin Wang, Dawei Feng |
| 6:30pm-7:00pm | Large Group Photo Session | |
| 6:30pm-8:30pm | **Reception (Free with Reception Ticket)** | |

# 4/6/2019 – Industry Summit Day

# - 2019 IEEE Industry Summit on Future Technologies for Smart Cities

# Location: Grand Ballroom 2, 3, 4

| 7:00am - 8:30pm | Breakfast | |
|---|---|---|
| 8:00am - 5:00pm | IEEE Summit Registration | |
| 8:30am - 8:50am | Conference Opening Session | |
| | Session Chair | Keith Perry, San Jose State University |
| | Welcome from IEEE Joint Conferences | |
| | Speaker: Bob Lim, VP and CIO San Jose State University<br>            Honorary Chair of IEEE SOSE 2019 and Summit | |
| | Speaker: Prof. Jerry Gao, San Jose State University, Director of STCCS Research Center<br>            IEEE Conference Joint Steering Board and Hosting Chair | |
| | Speaker: Prof. W. T. Tsai, Arizona State University, USA,<br>            The Founder of IEEE SOSE Conference | |
| | IEEE Joint Conference Program Overview    (Conference Key Organizers) | |
| | IEEE SOSE2019, IEEE MobileCloud2019, IEEE BigDataService 2019,<br>IEEE DAPPCON, IEEE AiTest2019 and five IEEE international workshops | |
| 8:50am-9:00am | Industry Summit Opening Session | |
| | Session Chair | Keith Perry, San Jose State University |
| | | Welcome Message from City Mayor of Newark, California<br>Alan L. Nagy, Mayor, City of Newark,, California |

| | | |
|---|---|---|
| 9:00am-9:30am | Keynote Session | Keynote Speaker: Lily Mei, Mayor, City of Fremont |
| | | Topic: Smart City Initiative Projects in the City of Fremont |
| 9:30am-10:30am | Session #1: Smart City Networking | |
| | Session Chair | Subhankar Dhar, San Jose State University, Industry Summit PC-Co Chair |
| | Moderator | Jie Xu, University of Leeds, UK |
| | Keynote Session | Speaker: Prof. Raj Jain, Washington University |
| | | Topic: Recent Advances in Networking and their Impact on Smart Cities |
| | | Speaker: Michelle Wu, Vice Mayor, Town of Los Altos Hills |
| | | Topic: Findings on digital transformation in small rural communities |
| 10:30am-10:40am | Tea Break | |
| 10:40am-11:30am | Session #2: Smart City and Smart Government | |
| | Session Chair | Jerry Gao, San Jose State University, Industry Summit Organization Chair |
| | Keynote Session | Speaker: Prof. Hong-Yuan Lee, National Taiwan University |
| | | Former Minister of the Interior of the Republic of China |
| | | Topic: Smart City and Smart Government |
| 11:30am-12:30pm | Session #3 | Smart City and Big Data |
| | Session Chair | Suhbankar Dhar, San Jose State University, Industry Summit PC-Co Chair |
| | Keynote Session | Speaker #1: Alexandrina Garcia-Verdin, Google |
| | | Speaker #2: David Cavazos, Google |
| | | Topic: Predictive Maintenance for Water Utilities |
| | | Speaker: Amit Nagar, IBS, SAP |
| | | Topic: Enterprise Machine Learning Use-Cases for Smart Cities |
| 12:30pm-1:30pm | Lunch | |

| Track 1 - Smart City Technologies and Solutions | | Location: Grand Ballroom 4 | |
|---|---|---|---|

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|---|---|---|---|
| 1:30pm- 3:30pm | Session #1 | Building Sustainable Smart Cities in Southern California | |
| | Session Chair | Jerome Tang, CEO, JustLight Technology, LTD, USA | |
| | Keynote Session | Speaker: Timothy Kelley, IVEDC, Imperial County, California and Alex, IVC County, California Topic: Smart City Challenges, Needs, and Opportunities in Imperial Valley County | |
| | | Speaker: Prof. Jerry Gao, Smart Tech Research Center, San Jose State University Topic: Building A Green Sensor Cloud-Based Emergency Warning Infrastructure and Service System for Nature Disasters | |
| | | Speaker: Ming-Shan Jeng, Industry Technology Research Institute (ITRI), Taiwan Topic: Smart City Technology in Taiwan | |
| 3:30pm-3:45pm | Tea Break | | |
| 3:45pm-4:30pm | Session #2 | Building Clean and Sustainable Smart Cities | |
| | Session Chair | Prof. Jerry Gao, San Jose State University, Director of STCCS Research Center IEEE Conference Joint Steering Board and Hosting Chair | |
| | Keynote Session | Speaker: Jerome Tang, CEO, JustLight Technology, LTD, USA Topic: Green Building Infrastructure, Services and Management | |
| | | Speaker: Hyeran Jeon, Smart Tech Research Center, San Jose State University Topic: Illegal Dumping Detection and Service Using Machine Learning and Big Data | |
| 4:30pm - 6:00pm | Session #3 | IOT, Big Data and Smart City Solutions | |
| | Session Chair | Jerome Tang, CEO, Justlight Technology, Inc. | |
| | Keynote Session | Speaker: Paul Townend, Co-Founder and CTO of Edgetic Topic: Data Center Growth, Challenges, and Inefficiencies in a Connected World | |
| | | Speaker: Jeffrey Voas, Computer Scientist, NIST Topic: The Fundamental Theory Behind the Internet of Things(IoT) | |

| | | Speaker: Kaikai Liu, Smart Tech Research Center, San Jose State University |
|---|---|---|
| | | Topic: Edge Computing and Infrastructure for Smart Cities |
| 6:00pm – 7:00pm | Shuttle Transportation to VIP Dinner Place (Pick up) at DoubleTree Hotel | |
| 7:00pm – 9:00pm | VIP Dinner with VIP Ticket | |

| Track 2 - AI and Machine Learning        Location: Grand Ballroom 3 | | |
|---|---|---|
| 1:30pm - 3:30pm | Session #1 | AI and Machine Learning |
| | Session Chair | Jun Huang, Google Inc., USA |
| | Keynote Session | Speaker: Tomas Pfister, Cloud AI, Google |
| | | Topic: From Insights to Solutions -- Research and the AI Journey |
| | | Speaker: Li Deng, Chief AI Officer, Citadel |
| | | Topic: AI Modeling |
| 3:30pm - 3:45pm | Tea Break | |
| 3:45pm - 4:30pm | Session #2 | Tomorrow AI and Machine Learning |
| | Moderator | Jun Huang, Google, Inc. USA |
| | | Panelists: |
| | | Panelist #1: Li Deng, Chief AI Officer, Citadel |
| | | Panelist #2: Bob Friday, CTO and co-founder, Mist Systems |
| | | Panelist #3: Taghi Khoshgoftaar, Florida Atlantic University |
| | | Panelist #4: Charles R. Jankowski Jr., PhD.Director, AI and Robotics Applications, |
| | | Cloudminds Technology |
| 4:30pm - 6:00pm | Session #3 | AI industry |
| | Session Chair | Prof. Hong Zhu, Oxford Brookes University, UK |
| | Keynote Session | Speakers: Bob Friday, CTO and co-founder, Mist Systems |
| | | Topic: Leveraging AI to Improve Mobile Experiences for Citizens, Employees and Guests |

| | | Speakers: Charles R. Jankowski Jr., PhD.Director, AI and Robotics Applications, Cloudminds Technology |
|---|---|---|
| | | Topic: Cloud Robotics for Smart Cities |
| 6:15pm – 7:00pm | Shuttle Transportation to VIP Dinner Place (Pick up) at DoubleTree Hotel | |
| 7:00pm – 9:00pm | VIP Dinner with VIP Ticket | |

| Track 3 - BlockChain Technology | | Location: Grand Ballroom 2 |
|---|---|---|
| 1:30pm - 3:30pm | Session #1 | BlockChain Technologies |
| | Session Chair | Dr. Wencen Wu, San Jose State University |
| | Keynote Session | Speaker: Prof. Wei-Tek Tsai, Beihang University |
| | | Topic: Beagle: A New Framework for Smart Contracts Taking Account of Law |
| | | Speakers: Mike DiPetrillo, Senior Director, VMware |
| | | Topic: Blockchain – From Conception to Production |
| | | Speaker: Qi Zhou, Founder/CEO, QuarkChain |
| | | Topic: Boson Consensus: A Decentralized, Secure, and Scalable Blockchain Sharding    Consensus |
| 3:30pm - 3:45pm | Tea Break | |
| 3:45pm - 4:30pm | Session #2 | Panel Discussion BlockChain for Tomorrow |
| | Moderator | Qi Zhou, Founder/CEO, QuarkChain |
| | | Panelists: |
| | | Panelist #1: Yao Meng, CEO/Co-founder, Trade Terminal |
| | | Panelist #2: Mo Dong, Co-founder, Celer Network |
| | | Panelist #3: Stephen Tse, CEO, Harmony One |
| | | Panelist #4: Alexander Skidanov, co-founder, Near Protocol |
| 4:30pm - 6:00pm | Session #3 | BlockChain Industry and Practice |
| | Session Chair | WenCen Wu, San Jose State University |

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|---|---|---|
| | Keynote Session | Speaker: Kaladhar Voruganti, VP, Equinix<br>Topic: Blockchain Beyond The Hype: Concepts and Industry Applications |
| | | Speaker: Chris McCann, General Partner, Proof of Capital<br>Topic: Venture Capital: How a venture capital partner looks<br>at the Blockchain market |
| 6:15pm – 7:00pm | Shuttle Transportation to VIP Dinner Place (Pick up) at DoubleTree Hotel | |
| 7:00pm – 9:00pm | VIP Dinner with VIP Ticket | |

| 4/7/2019 - Conference Day 1 | IEEE BigDataService 2019 | Location: Grand Ballroom 3 |
|---|---|---|
| **The Fifth IEEE International Conference on Big Data Service and Applications** | | |
| 7:30am-8:50pm | Breakfast | |
| 8:00am-5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am-9:35am | Keynote Session | Keynote Speaker: Taghi M. Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab. |
| | | Topic: Machine Learning, Big Data and Artificial Intelligence |
| | Session Chair | Simon Shim, San Jose State University, USA |
| 9:35am-9:45am | Break | |
| 9:45am-11:00am | Session #1 | Big Data Algorithms and Analysis |
| | Session Chair | Taghi Khoshgoftaar, Florida Atlantic University |
| | Paper ID: 36 | Paper Title: Anomaly Detection with HMM Gauge Likelihood Analysis |
| | | Authors:Boris Lorbeer, Tanja Deutsch, Peter Ruppel and Axel Küpper |
| | Paper ID: 64 | Paper Title: Automating Hot-spot Analysis to Increase Spatial Capacity |
| | | Authors: Mario Pitalua, Susan Mengel, Lisa Gittner and Hafiz Khan |
| | Paper ID: 70 | Paper Title: A Scientific Data Representation Through Particle Flow Based Linear Interpolation |
| | | Authors: Yu Pan, Feiyu Zhu and Hongfeng Yu |
| 11:00am-11:15am | Tea Break | |
| 11:15am-12:30pm | Session #2 | Big Data Processing and Platform |
| | Session Chair | Simon Shim, San Jose State University, USA |
| | Paper ID: 44 | Paper Title: Pathfinder: Fault Tolerance for Stream Processing Systems |
| | | Authors: Bernhard Knasmüller, Christoph Hochreiner and Stefan Schulte |
| | Paper ID: 45 | Paper Title: LHF: A New Archive based Approach to Accelerate Massive Small Files Access Performance in HDFS |
| | | Authors: Wenjun Tao, Yanlong Zhai and Jude Tchaye-Kondi |

| | Paper ID: 73 | Paper Title: Improvement Of Data Throughput In Data-Intensive Cloud Computing Applications |
|---|---|---|
| | | Authors: Ibrahim Ibrahim and Mostafa Bassiouni |
| 12:30pm-1:30pm | Lunch | |
| 1:30pm-2:15pm | Keynote Session | Keynote Speaker: Divyesh Jadav, Manager in Cloud, IoT & Systems Lifecycle Analytics, IBM Research |
| | | Topic: From Blocks to Structures: Blockchain in the Enterprise |
| | Session Chair | Axel Küpper, Technische Universität Berlin/Telekom Innovation Laboratories, Germany |
| 2:15pm-3:30pm | Session #3 | Big Data Services and Applications I |
| | Session Chair | Hyeran Jeon, San Jose State University, USA |
| | Paper ID: 8 | Title: Code Failure Prediction and Pattern Extraction using LSTM Networks |
| | | Authors: Mahdi Hajiaghayi and Ehsan Vahedi |
| | Paper ID: 11 | Title: Exploring Machine Learning techniques for Smart Drainage System |
| | | Authors: Yan Pang and Changhua Chen |
| | Paper ID: 14 | Title: Will Your Classmates and Colleagues Affect Your Development in the Workplace: |
| | | Predicting employees' growth based on interpersonal environment |
| | | Authors: Jia-Min Liu, Ji-Ting Li, Tao Wang and Ren-Jie He |
| | Paper ID: 92 | Title: Study on Tourists' Perception of the Grand Canal Cultural Heritage Based on Network Travels |
| | | Authors: Kaijing Shi and Ying Zhang |
| 3:30pm -3:45pm | Tea Break | |
| 3:45pm -4:30pm | Shared Panel #2 | Panel Title: Big Data Computing and Service for Tomorrow |
| | Moderator | Taghi Khoshgoftaar, Florida Atlantic University |
| | | Panelists: Paul Townend, Deng Li, Fan-Jing Meng, W. T. Tsai |
| 4:30pm-4:45pm | Break | |
| 4:45pm-6:00pm | Session #4 | Big Data Services and Applications II |
| | Session Chair | Simon Shim, San Jose State University, USA |
| | Paper ID: 48 | Paper Title: Generating Knowledge Maps for Songs and Users in Music Market with Probabilistic Topic Model |

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|---|---|---|
| | | Authors: Jingwen Zhou, Yushun Fan and Junqi Zhang |
| | Paper ID: 63 | Paper Title: Predictive Maintenance System for efficiency    improvement of heating equipment |
| | | Authors:Ana Rita Santiago, Mário Antunes, João Paulo Barraca, Diogo Gomes and Rui L. Aguiar |
| | Paper ID: 62 | Paper Title: iCATS: An Evolutionary Big Data Workflow Scheduling in the Cloud    Using Cultural Algorithms |
| | | Authors:Seyed Ziae Mousavi Mojab, Mahdi Ebrahimi, Robert Reynolds and Shiyong Lu |
| | Paper ID: 6 | Paper Title: Touchdown on the Cloud: Impact of the Super Bowl onInternet, Cloud and web services |
| | | Authors: Chen Wang and Hyong Kim |
| 6:00pm-6:30pm | Joint Conference and Workshop Photo Session II | |
| 6:30pm-9:30pm | Banquet at DoubleTree Hotel Ballroom (Free with One Banquet Ticket) | |


| 4/7/2019 - Conference Day 1 - IEEE DAPPCON 2019          Location: Grand Ballroom 1A<br>IEEE International Conference on Decentralized Applications and Infrastructures | | |
|---|---|---|
| 7:30am-8:50am | Breakfast | |
| 8:00am-5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am-9:35am | Keynote Session | Keynote Speaker: Taghi M. Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab. |
| | | Topic: Machine Learning, Big Data and Artificial Intelligence |
| | Session Chair | Simon Shim, San Jose State University, USA |
| 9:35am-9:45am | Break | |
| 9:45am-11:00am | Session #1 | Full Papers I: Blockchain Protocols |
| | Session Chair | Peter Ruppel, Technische Universität Berlin, Germany |
| | | Title: Blockchain: A novel approach for the consensus algorithm using Condorcet Voting procedure |
| | | Authors: David Vangulick; Bertrand Cornélusse; Damien Ernst |
| | | Title: Alt-PoW: An Alternative Proof-of-Work Mechanism |
| | | Authors: Sarah Sharkey; Hitesh Tewari |

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|---|---|---|
| | | Title: Lock and Load: A Model for Free Blockchain Transactions through Token Locking |
| | | Authors: Paul Merrill; Thomas H. Austin; Jenil Thakker; Younghee Park; Justin Rietz |
| 11:00am-11:15am | | Tea Break |
| 11:15am-12:30pm | Session #2 | Full Papers II: Applications |
| | Session Chair | Gernot Salzer, Technische Universität Wien, Austria |
| | | Paper Title: Tawki: Towards Self-Sovereign Social Communication |
| | | Authors: Martin Westerkamp; Sebastian Göndör; Axel Küpper |
| | | Paper Title: Reducing Automotive Counterfeiting using Blockchain: Benefits and Challenges |
| | | Authors: Donghang Lu; Pedro Moreno-Sanchez, A. Zeryihun; S. Bajpayi, Sihao Yin, K. Feldman, J. Kosofsky, Pramita Mitra; Aniket Kate |
| | | Paper Title: A Usage-Based Mechanism for Securing Systems via Blockchains |
| | | Authors: Eric Brigham; John Doucette; Matthew Lepinski |
| 12:30pm-1:30pm | | Lunch |
| 1:30pm-2:15pm | Keynote Session | Keynote Speaker: Divyesh Jadav, Manager in Cloud, IoT & Systems Lifecycle Analytics, IBM Research |
| | | Topic: From Blocks to Structures: Blockchain in the Enterprise |
| | Session Chair | Axel Küpper, Technische Universität Berlin/Telekom Innovation Laboratories, Germany |
| 2:15pm-3:30pm | Session #3 | Full Papers III: Smart Contracts & Analytics |
| | Session Chair | Axel Küpper, Technische Universität Berlin/Telekom Innovation Laboratories, Germany |
| | | Paper Title: Supporting Reuse of Smart Contracts through Service Orientation and Assisted Development |
| | | Authors: Luca Guida; Florian Daniel |
| | | Paper Title: A Survey of Tools for Analyzing Ethereum Smart Contracts |
| | | Authors: Monika di Angelo; Gernot Salzer |
| | | Paper Title: Performance Modeling and Analysis of the Bitcoin Inventory Protocol |
| | | Authors: Yahya Shahsavari; Kaiwen Zhang; Chamseddine Talhi |
| 3:30pm -3:45pm | | Tea Break |
| 3:45pm -4:30pm | Panel Session | Panel Title: Big Data Computing and Service for Tomorrow |

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|---|---|---|
| | Moderator | Taghi Khoshgoftaar, Professor, Florida Atlantic University |
| | | Panelists: Paul Townend, Deng Li, Fan-jing Meng, W. T. Tsai |
| 4:30pm-4:45pm | | Break |
| 4:45pm-6:00pm | Session #4 | Full Papers IV: Identity & Token Economy |
| | Session Chair | Monika di Angelo, Technische Universität Wien, Austria |
| | | Title: A Risk Redistribution Standard for Practical Cryptocurrency Payment |
| | | Authors: Yao-Chieh Hu; Ting-Ting Lee; Chungsang Tom Lam |
| | | Title: Splitting and Aggregating Signatures in Cryptocurrency Protocols |
| | | Authors: S. Sharmila Deva Selvi; Arinjita Paul; C. Pandu Rangan; Siva Dirisala; Saswata Basu |
| | | Title: On the Practicality of a Smart Contract PKI |
| | | Authors: Christos Patsonakis; Katerina Samari; Aggelos Kiayias; Mema Roussopoulos |
| 6:00pm-6:30pm | | Joint Conference and Workshop Photo Session II |
| 7:30pm-9:30pm | | Banquet at DoubleTree Hotel Ballroom (Free with One Banquet Ticket) |

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|---|---|---|
| **4/7/2019 - Conference Day 1 - IEEE Mobile Cloud 2019**        **Location: Ballroom 1B**<br>**The Seventh IEEE International Conference on Mobile Cloud Computing, Services, and Engineering** | | |
| 7:30am-8:50am | | Breakfast |
| 8:00am-5:00pm | | IEEE Joint Conference and Workshop Registration |
| 8:50am-9:35am | Keynote Session | Keynote Speaker: Taghi M. Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab. |
| | | Topic: Machine Learning, Big Data and Artificial Intelligence |
| | Session Chair | Simon Shim, San Jose State University, USA |
| 9:35am-9:45am | | Break |
| 9:45am-11:00am | Session #1 | Mobile Edge Computing |
| | Session Chair | Yuuichi Teranishi, National Inst. Communications Technology, Japan |
| | Paper ID: 7 | Title: Hierarchical Cloud-Fog Platform for Communication in Disaster Incident Coordination |

| | | Authors: Duo Jiang, R. Huang, Prasad Calyam, John Gillis, Olivia Apperson, Dmitrii Chemodanov, Fatih Demir and Salman Ahmad |
|---|---|---|
| | Paper ID: 22 | Title: A Human-Centric Cloud and Fog-Assisted IoT Platform for Disaster Management |
| | | Authors: Bikesh Maharjan, Juan Li, Shadi Alian and Yan Bai |
| | Paper ID: 6 | Title: Performance Evaluation of Applications Assisted with Two-tier MEC Architecture using High Performance Drives |
| | | Authors: Qinling Zheng, Zhan Ping and Pingping Lin |
| 11:00am-11:15am | Tea Break | |
| 11:15am-12:30pm | Session #2 | Mobile Cloud and networking |
| | Session Chair | Yan Bai, University of Washington Tacoma, USA |
| | Paper ID: 34 | Title: Cloud, Fog, and Dew Robotics: architectures for next generation applications |
| | | Authors: Alessio Botta, Luigi Gallo and Giorgio Ventre |
| | Paper ID: 25 | Title: Low-Power Smart Cities network with LoRa and Bluetooth |
| | | Authors: Celio Marcio Soares Ferreira, Ricardo Augusto Rabelo Oliveira and Jorge Sá Silva |
| | Paper ID: 30 | Title: Smart Resource Planning for Live Migration in Edge Computing for Industrial Scenario |
| | | Authors: Keerthana Govindaraj, Jibin P John, Alexander Artemenko and Andreas Kirstaedter |
| 12:30pm-1:30pm | Lunch | |
| 1:30pm-2:15pm | Keynote Session | Keynote Speaker: Divyesh Jadav, Manager in Cloud, IoT & Systems Lifecycle Analytics, IBM Research |
| | | Topic: From Blocks to Structures: Blockchain in the Enterprise |
| | Session Chair | Axel Küpper, Technische Universität Berlin/Telekom Innovation Laboratories, Germany |
| 2:15pm-3:30pm | Session #3 | Mobile Cloud and applications |
| | Session Chair | Sato Hiroyuki, University of Tokyo, Japan |
| | Paper ID: 8 | Title: Asterism: A Decentralized File Sharing for MobileDevices |
| | | Authors: Olli-Pekka Heinisuo, Valentina Lenarduzzi and Davide Taibi |
| | Paper ID: 29 | Title: Study Area Recommendation via Network Log Analytics |
| | | Authors: Anupama Upadhayula, Avinash Ravilla, Ishwarya Varadarajan, Sowmya Viswanathan and David Anastasiu |
| | Paper ID: 35 | Title: Wireless ECG Biometric Authentication via the Mobile Cloud |

| | | Authors: Mohammad Derawi, Faouzi Alaya Cheikh and Mohamed Bouzidi |
|---|---|---|
| | Paper ID: 32 | Title: Predict the Next Used Smartphone App based on Long Short-term Memory Neural Network |
| | | Authors: Zhenggui Xiang |
| 3:30pm -3:45pm | | Tea Break |
| 3:45pm -4:30pm | Shared Panel #2 | Panel Title: Big Data Computing and Service for Tomorrow |
| | Moderator: | Taghi Khoshgoftaar, Florida Atlantic University |
| | | Panelists: Paull Townend, Deng Li, Fan-Jing Meng, W. T. Tsai |
| 4:30pm-4:45pm | | Break |
| 4:45pm-6:00pm | Session #4 | Session Title: Resource managements on Mobile Cloud |
| | Session Chair: | Alessio Botta, University of Napoli Federico II, Italy |
| | Paper ID: 18 | Title: MAMoC-Android: Multisite Adaptive Computation Offloading for Android Applications |
| | | Authors: Dawand Sulaiman and Adam Barker |
| | Paper ID: 33 | Title: Throughput Optimized Scheduler for Dispersed Computing Systems |
| | | Authors: Diyi Hu and Bhaskar Krishnamachari |
| | Paper ID: 31 | Title: Enabling High Availability Edge Computing Platform |
| | | Authors: Deepa Rajendra Sangolli, Nagthej Manangi Ravindrarao, Priyanka Chidambar Patil, Thrishna Palissery and Kaikai Liu |
| 6:00pm-6:30pm | | Joint Conference and Workshop Photo Session II |
| 7:30pm-9:30pm | | Banquet at DoubleTree Hotel Ballroom (Free with One Banquet Ticket) |

| 4/7/2019 - Conference Day 1 - IEEE SOSE 2019      Location: Grand Ballroom 1C Thirteenth IEEE International Conference on Service-Oriented System Engineering | | |
|---|---|---|
| 7:30am-8:50am | | Breakfast |
| 8:00pm-5:00pm | | IEEE Joint Conference and Workshop Registration |
| 8:50am-9:35am | Keynote Session | Keynote Speaker: Taghi M. Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab. |

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|---|---|---|
| | | Topic: Machine Learning, Big Data and Artificial Intelligence |
| | | Simon Shim, San Jose State University, USA |
| 9:35am-9:45am | | Break |
| 9:45am-11:00am | Session #1 | Session Title: Quality of Data and Edge Computing |
| | Session Chair | Paul Townend UK |
| | Paper ID: | Title: Distributed Computing in Cyber-Physical Intelligence: Robotic Perception as an Example (invited paper)<br>Authors: Bo Ding, J. Xu, H. Wang, H. Zhang, H. Liu, and D. Feng |
| | Paper ID: | Title:  A Service-Oriented Approach for Assessing the Quality of Data for the Internet of Things (invited paper)<br>Authors: Eyhab Al-Masri and Yan Bai |
| 11:00am-11:15am | | Tea Break |
| 11:15am-12:30pm | Session #2 | Session Title: AI for Design and Testing of Service Systems |
| | Session Chair | Chuanqi Tao |
| | Paper ID: | Title: AI-based Security Design of Mobile Crowdsensing Systems: Review, Challenges and Case Studies (invited Paper)<br>Authors: Yueqian Zhang and Burak Kantarci |
| | Paper ID: | Title: What is AI Testing and Why? (invited Paper)<br>Authors: Jerry Gao, Chuanqi Tao, Jie Dou, and Shengqi Lu |
| 12:30pm-1:30pm | | Lunch |
| 1:30pm-2:15pm | Keynote Session | Keynote Speaker: Divyesh Jadav, Manager in Cloud, IoT & Systems Lifecycle Analytics, IBM Research |
| | Session Chair | Axel Küpper, Technische Universität Berlin/Telekom Innovation Laboratories, Germany |
| 2:15pm-3:30pm | Session #3 | Microservices |
| | Session Chair |  Guido Wirtz, University of Bamberg, Germany |
| | Paper ID: | Title: Using Decision Models for Documenting Microservice Architectures: A Student Experiment and |

| | | |
|---|---|---|
| | | Focus Group Study |
| | | Authors: Stefan Haselböck, Rainer Weinreich and Georg Buchgeher |
| | Paper ID: | Title: Evaluating Cloud Microservices with DIRECTOR |
| | | Authors: Marcelo França and Cláudia Werner |
| | Paper ID: | Title: Viewpoint-specific Model-driven Microservice Development with Interlinked Modeling Languages |
| | | Authors: Florian Rademacher, Jonas Sorgalla, Sabine Sachweh and Albert Zündorf |
| 3:30pm -3:45pm | Tea Break | |
| 3:45pm -4:30pm | Shared Panel #2 | Title: Big Data Computing and Service for Tomorrow |
| | Moderator | Taghi Khoshgoftaar, Florida Atlantic University |
| | | Panelists: Deng Li, Paul Townend, Fan-Jing Meng, W. T. Tsai |
| 4:30pm-4:45pm | Break | |
| 4:45pm-6:00pm | Session #4 | Algorithms for Specific Service and Service Engineering Applications |
| | Session Chair | Stephan Reiff-Marganiec, University of Leicester, UK |
| | Paper ID: | Title: Effective Vehicle Tracking Algorithm for Smart Traffic Networks |
| | | Authors: Shuai Hua and David C. Anastasiu |
| | Paper ID: | Title: A Linear Logic Based Method for Deadlock-freeness Scenarios Monitoring in Web Services Composition |
| | | Authors: Lígia Maria Soares Passos, Stéphane Julia and Bruno Francisco Martins da Silva |
| 6:00pm-6:30pm | Joint Conference and Workshop Photo Session II | |
| 7:30pm-9:30pm | Banquet at DoubleTree Hotel Ballroom (Free with One Banquet Ticket) | |

**4/7/2019 - Conference Day 1 – IEEE AITest 2019          Location: Grand Ballroom 4**

**The First IEEE International Conference on Artificial Intelligence Testing**

| | | |
|---|---|---|
| 7:30am-8:50am | Breakfast | |
| 8:00am-5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am-9:35am | Keynote Session | Keynote Speaker: Taghi M. Khoshgoftaar, Professor, Florida Atlantic University, Director of NSF Big Data Training and Research Lab.<br>Topic: Machine Learning, Big Data and Artificial Intelligence |
| | Session Chair | Simon Shim, San Jose State University |
| 9:35am-9:45am | Break | |
| 9:45am-11:00am | Session #1 | Fault Localization and Anomaly Detection |
| | Session Chair | Jerry Gao, San Jose State University |
| | Paper ID: | Title: A Multiple Fault localization Approach based on multicriteria Analytical Hierarchy Process |
| | | Authors: Noureddine Aribi, Nadjib Lazaar, Samir Loudni, Yahia Lebbah and Mehdi Maamar |
| | Paper ID: | Title: Generation of Movement Explanations for Testing Gesture Based Co-operative Learning Applications |
| | | Authors: Ayan Banerjee, Prajwal Paudyal and Sandeep Gupta |
| | Paper ID: | Title: Network anomaly detection using Two-dimensional Hidden Markov Model based Viterbi algorithm(short) |
| | | Authors: Sulaiman Alhaidari and Mohamed Zohdy |
| 11:00am-11:15am | Tea Break | |
| 11:15am-12:30pm | Session #2 | Test Cases and Neural Network |

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|---|---|---|
| | Session Chair | Marc Roper, University of Strathclyde, UK |
| | Paper ID: | Paper: Automated Functional Dependency Detection Between Test Cases Using Doc2Vec and Clustering |
| | | Authors: Sahar Tahvili, Leo Hatvani, Michael Felderer, Wasif Afzal and Markus Bohlin |
| | Paper ID: | Paper: Towards structured evaluation of deep neural network supervisors |
| | | Authors: Jens Henriksson, Christian Berger, Markus Borg, Lars Tornberg, Cristofer Englund, S. R. Sathyamoorthy, Stig Ursing |
| | Paper ID: | Paper: Neural Network Based Test Case Generation for Data-flow Oriented Testing(short) |
| | | Authors: Shunhui Ji and Qin Chen |
| 12:30pm-1:30pm | Lunch | |
| 1:30pm-2:20pm | Keynote Session | Keynote Speaker: Divyesh Jadav, Manager in Cloud, IoT & Systems Lifecycle Analytics, IBM Research Topic: From Blocks to Structures: Blockchain in the Enterprise |
| | Session Chair | Axel Küpper, Technische Universität Berlin/Telekom Innovation Laboratories, Germany |
| 2:20pm-2:30pm | Break | |
| 2:30pm-3:30pm | Session #3 | Automated Testing and AI |
| | Session Chair | Franz Wotawa |
| | Paper ID: | Title: Chatbot Testing Using AI Planning |
| | | Authors: Josip Bozic, Oliver A. Tazl and Franz Wotawa |
| | Paper ID: | Title: User-Assisted Log Analysis for Quality Control of Distributed Fintech Systems |
| | | Authors: Iosif Itkin, Anna Gromova, Anton Sitnikov, Rostislav Yavorskiy, Evgenii Tsymbalov, Andrey Novikov and Kirill Rudakov |
| | Paper ID: | Title: ATARI: Autonomous Testing and Real-time Intelligence - A framework for autonomously testing modern applications |
| | | Authors: Yan Xu, Summera Shamrooz, Qianmu Li and Jun Hou |
| 3:30pm -3:40pm | Tea Break | |

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|---|---|---|
| 3:40pm -4:30pm | Panel Session | Big Data Computing and Service for Tomorrow |
| | Moderator | Taghi Khoshgoftaar, Florida Atlantic University |
| | | Panelists: Paul Townend, Deng Li, and Fan-Jing Meng, W. T. Tsai |
| 4:30pm-4:45pm | Break | |
| 4:45pm-6:00pm | Session #4 | Testing for DNNs |
| | Session Chair | Jerry Gao, San Jose State University |
| | Paper ID: | Title: Assessing the Robustness of Conversational Agents using Paraphrases |
| | | Authors :Jonathan Guichard, Elayne Ruane, Ross Smith, Dan Bean and Anthony Ventresque |
| | Paper ID: | Title: Input prioritization for testing neural networks |
| | | Authors: Taejoon Byun, Vaibhav Sharma, Abhishek Vijayakumar, Sanjai Rayadurgam and Darren Cofer |
| | Paper ID: | Title: Condition-Guided Adversarial Generative Testing for Deep Learning Systems (short) |
| | | Authors: Qiyin Dai and Pengcheng Zhang |
| 6:00pm-6:30pm | Joint Conference and Workshop Photo Session II | |
| 7:30pm-9:30pm | Banquet at DoubleTree Hotel Ballroom (Free with One Banquet Ticket) | |

| 4/8/2019 - Conference Day 2 - IEEE BigDataService 2019 | | Location: Grand Ballroom 3 |
|---|---|---|
| **The Fifth IEEE International Conference On Big Data Computing Service and Applications** | | |
| 7:30am –8:50am | Breakfast | |
| 8:00am –5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am -9:35am | Keynote Session | Keynote Speaker: Franz Wotawa, Professor, Graz University of Technology, Austria<br>Title: AI-based AI-testing |
| | Session Chair | Hong Zhu, Oxford Brookes University, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | Session 5 | Big Data and Analytics for Healthcare |
| | Session Chair | Jerry Gao,, San Jose State University |
| | Paper ID: 74 | Title: GPU-DFC: A GPU-based parallel algorithm for computing dynamic-functional connectivity of big fMRI data |
| | | Authors: Taban Eslami and Fahad Saeed |
| | Paper ID: 22 | Title: Difference analysis of brain network working memory data with EEG sub-sequence feature vector as node |
| | | Authors: Li Haifang, Yang Xiong, Yao Rong, Yang Pengfei and Wang Zhe |
| | Paper ID: 23 | Title: Classification of Online Medical Discourse by Modified Co-training |
| | | Authors: Rana Alnashwan, Humphrey Sorensen and Adrian O'Riordan |
| 11:00am -11:15am | Tea Break | |
| 11:15am -12:30pm | Session 6 | Big Data Recommendation |
| | Session Chair | Fan Jing Meng, IBM Research, China |
| | Paper ID: 79 | Title: SOREC: A Semantic Content-based Recommendation System for Parsimonious Sociology Theory Construction |

| | | |
|---|---|---|
| | | Authors: Mingzhe Du, Jose Vidal and Barry Markovsky |
| | Paper ID: 46 | Title: An Automated Framework to Recommend A Suitable Academic Program, Course and Instructor |
| | | Authors: Ahmad Slim, Don Hush, Tushar Ojha, Chaouki Abdallah, Gregory Heileman and Georges El-Howayek |
| <span style="background:yellow">12:30pm-1:30pm</span> | Lunch | |
| 1:30am -2:15pm | Keynote | Keynote Speaker: Fan-Jing Meng, IBM Research, China<br>Topic: Cognitive Cloud/IT Operations and Management in Real World |
| | Session Chair | Guido Wirtz, University of Bamberg, Germany |
| 2:15pm – 2:30pm | Break | |
| 2:30pm - 4:00pm | Session #7 | Big Data Real-time Analysis and Security |
| | Session Chair | Simon Shim, San Jose State University |
| | Paper ID: 56 | Title: Real Time Attention based Bidirectional Long Short-Term Memory Networks for Air Pollution Forecasting |
| | | Authors: Divyam Madaan, Radhika Dua, Prerana Mukherjee and Brejesh Lall |
| | Paper ID: 80 | Title: Dynamic Human Behavior Pattern Detection and Classificatio |
| | | Authors: Shuqin Wang, Jerry Gao and Hanping Lin |
| | Paper ID: 71 | Title: Password Expiration Strategy: A Perspective of Ecological Memory |
| | | Authors: Yiming Zhao, Wenting Li, Zijian Zhang and Ping Wang |
| 4:00pm -4:15pm | Tea Break | |
| 4:15pm -5:15pm | Panel Session | Title: Ai Testing and Automation – Challenges, Issues, and Needs |
| | Moderator: | Marc Roper, University of Strathclyde, UK |
| | | Panelists: Jerry Gao, Franz Wotawa, Hong Zhu, and ZhiQuan (George) ZHOU |
| 5:15pm -6:00pm | Session #8 | Semantic-based Data Analysis |
| | Session Chair | Fan-Jing Meng, IBM Research, China |
| | Paper ID: 10 | Title: Sentiment Analysis of Chinese Product Reviews using Gated Recurrent Unit |

| | Paper ID: 37 | Authors: Yan Pang, Jun Sheng Lee and Denis Zuba |
| --- | --- | --- |
| | | Title: Semantic-Guided Hashing for Cross-Modal Retrieval |
| | | Authors: Zhikui Chen, Jianing Du and Fangming Zhong |
| 6:00pm - 7:30pm | | Break |
| 7:30pm-9:00pm | | 2020 IEEE Joint Conference Planning Meeting II (Seminar II) |

## 4/8/2019 - Conference Day 2 – IEEE DAPPCON 2019      Location: Ballroom 4

### IEEE International Conference on Decentralized Applications and Infrastructures

| 8:00am-5:00pm | | IEEE Joint Conference and Workshop Registration |
| --- | --- | --- |
| 8:50am -9:35am | Keynote Session | Keynote Speaker: Franz Wotawa, Professor, Graz University of Technology, Austria<br>Topic: AI-based AI-testing |
| | Session Chair | Hong Zhu, Oxford Brookes University, UK |
| 9:35am - 9:45am | | Break |
| 9:45am -11:00am | Session | Short Papers I: Blockchain Protocols |
| | Session Chair | Sang-Yoon Chang, University of Colorado Colorado Springs , United States of America |
| | | Title: Proof-of-Learning: a Blockchain Consensus Mechanism based on Machine Learning Competitions |
| | | Authors: Felipe Bravo-Marquez; Steve Reeves; Martín Ugarte |
| | | Title: Irregular-Program-Based Hash Algorithms |
| | | Authors: Qi Zhou |
| | | Title: An Improved Non-Interactive Zero-Knowledge Range Proof for Decentralized Applications |
| | | Authors: Ya-Che Tsai; Raylin Tso; Zi-Yuan Liu; Kung Chen |
| 11:00am -11:15am | | Tea Break |
| 11:15am -12:30pm | Session #6 | Short Papers II: Applications I |

| | Session Chair | Florian Daniel, Politecnico di Milano, Italy |
|---|---|---|
| | | Title: A Secure Permissioned Blockchain Based System for Trademarks |
| | | Authors: Girish J. Showkatramani; Nidhi Khatri; Arlene Landicho; Darwin Layog |
| | | Title: PartChain: A Decentralized Traceability Application for Multi-Tier Supply Chain Networks in the Automotive Industry |
| | | Authors: Daniel Miehle; Dominic Henze; Andreas Seitz; Andre Luckow; Bernd Bruegge |
| | | Title: Integration of Blockchain and Internet of Things in a Car Supply Chain |
| | | Authors: Tim Reimers; Felix Leber; Ulrike Lechner |
| 12:30pm-1:30pm | Lunch | |
| 1:30am -2:15pm | Keynote Session | Keynote Speaker: Fan-Jing Meng, IBM Research, China<br>Topic: Cognitive Cloud/IT Operations and Management in Real World |
| | Session Chair | Guido Wirtz, University of Bamberg, Germany |
| 2:15pm-2:30pm | Large Group Photo Session | |
| 2:30pm -4:00pm | Session #7 | Short Papers III: Applications II |
| | Session Chair | Kaiwen Zhang, École de technologie supérieure Montréal, Canada |
| | | Title: Leveraging Standards Based Ontological Concepts in Distributed Ledgers: A Healthcare Smart Contract Example |
| | | Authors: Mengyi Li; Lirong Xia; Oshani Seneviratne |
| | | Title: DevID: Blockchain-based Portfolios for Software Developers |
| | | Authors: Martijn De Vos; Mitchell Olsthoorn; Johan Pouwelse |
| | | Title: Process Mining for Decentralized Applications |
| | | Authors: Marcel Müller; Peter Ruppel |
| 4:15pm -4:30pm | Tea Break | |
| 4:30pm -5:15pm | Panel Session | AI Testing Panel - Ai Testing and Automation - Challenges, Issues, and Needs |
| | Moderator | Marc Roper, University of Strathclyde, UK |

| | | Panelists: Jerry Gao, Franz Wotawa, Hong Zhu, George Zhou |
|---|---|---|
| 5:15pm -6:30pm | Session #8 | Short Papers IV: Smart Contracts |
| | Session Chair | Younghee Park, San Jose State University, United States of America |
| | | Title: An Alternative Paradigm for Developing and Pricing Storage on Smart Contract Platforms |
| | | Authors: Christos Patsonakis; Mema Roussopoulos |
| | | Title: Modularizing Cross-cutting Concerns with Aspect-Oriented Extensions for Solidity |
| | | Authors: Chien-Che Hung; Kung Chen; Chun-Feng Liao |
| | | Title: Strengthening Smart Contracts to Handle Unexpected Situations |
| | | Authors: Shuze Liu; Farhad Mohsin; Lirong Xia; Oshani Seneviratne |
| 6:00pm - 7:30pm | | Dinner Break |
| 7:30pm-9:00pm | | 2020 IEEE Joint Conference Planning Meeting II (Seminar II) |


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|---|---|---|
| **4/8/2019 - Location: Grand Ballroom 1B** <br><br> **IEEE International Workshop on Medical, Healthcare using Big Data Technologies** |||
| 11:15am-12:30pm | Session #1 | Modeling and Analytics on Precision Medicine |
| | Session Chair | Fenglian Li, Taiyuan University of Technology, China |
| | Paper ID:69 | Title: Personalized Health Monitoring using Predictive Analytics |
| | | Authors: Poojitha Amin, Nikhitha Reddy Anikireddypally, Suraj Khurana, Sneha Vadakkemadathil and Wencen Wu |
| | Paper ID:76 | Title: Modeling of Vast Particle Movements in Microvasculature system for Blood Flow Measurement |
| | | Authors: Yanwen Zhu, Zhiguo Gui and Yu Shang |
| | Paper ID:77 | Title: Jie Wu and Wei ChenUsing nonlinear sparse Bayesian learning model to identify the correlation |

| | | between multiple clinical cognitive scores and neuroimaging measurements |
|---|---|---|
| | | Authors: Peng Zhang, Zhiguo Gui, Hao Ling, Xiaojuan Zhang, Caicai Liu and Yu Shang |
| **12:30pm-1:30pm** | | **Lunch** |
| 1:30pm -2:20pm | Keynote Session | Keynote Speaker: Fan-Jing Meng, IBM Research, China<br>Topic: Cognitive Cloud/IT Operations and Management in Real World |
| | Session Chair | Guido Wirtz, University of Bamberg, Germany |
| 2:20pm-2:30pm | | Break |
| 2:30pm -4:00pm | Workshop #5 - Section #1 | Classification on Precision Medicine |
| | Session Chair | Xueying Zhang, Taiyuan University of Technology, China |
| | Paper ID:85 | Title: Features of Hierarchical Fuzzy Entropy of Stroke based on EEG Signal and Its Application in Stroke Classification |
| | | Authors: Fenglian Li, Can Wang, Xueying Zhang, Fengyun Hu, Wenhui Jia and Yuzhou Fan |
| | Paper ID:79 | Title: Fuzzy Support Vector Machine with Imbalanced regulator and its Application in stroke Classification |
| | | Authors: Xueying Zhang, Xin Wei, Fenglian Li, Fengyun Hu, Wenhui Jia and Chao Wang |
| | Paper ID:86 | Title: Towards Classifying Epileptic Seizures using Entropy Variants |
| | | Authors: Waqar Hussain and Xiang Jie |
| 4:15pm -4:30pm | | Tea Break |
| 4:30pm -5:15pm | Panel Section | Ai Testing and Automation - Challenges, Issues, and Needs |
| | Moderators | Marc Roper, University of Strathclyde, UK |
| | | Panelists: Jerry Gao, Franz Wotawa, Hong Zhu, and ZhiQuan (George) ZHOU |
| 5:15pm -6:30pm | Workshop #5 | New Approaches on Precision Medicine |
| | Session Chair: | Richard Quan |
| | Paper ID:27 | Title: The Tumor Infiltrating Immune Cell Components Are Significant Markers for Prognostics of Radiotherapy as Revealed by Cell Type Deconvolution |

| | Paper ID:75 | Authors: Min Zhu, Xiaolai Li, Yunjian Ge, Jinfu Nie and Xueling Li |
|---|---|---|
| | | Title: Approach to Enhance Tissue Blood Flow Measurement by Combining Ultrasound Modulation with Diffuse Correlation Spectroscopy |
| | | Authors: Hao Ling, Zhiguo Gui, Peng Zhang, Xiaojuan Zhang, Caicai Liu and Yu Shang |
| 6:30pm-7:30pm | Dinner Break | |
| 7:30pm-9:00pm | 2020 IEEE Joint Conference Planning Meeting II (Seminar II) | |

| 4/8/2019 - Conference Day 2 - IEEE SOSE201 Location: Grand Ballroom 1C<br><br>Thirteenth IEEE International Conference on Service-Oriented System Engineering | | |
|---|---|---|
| 7:30am-8:50am | Breakfast | |
| 8:00am-5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am-9:35am | Keynote Session | Keynote Speaker: Franz Wotawa, Professor, Graz University of Technology, Austria<br>Title: AI-based AI-testing |
| | Session Chair | Hong Zhu, Oxford Brookes University, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | Session #5 | Session Title: Work-in-Progress II |
| | Session Chair | Stephan Reiff-Marganiec, UK |
| | Paper ID: | Title: On Similarity of Object-Aware Workflows<br>Authors: Mohammad Javad Amiri, Mahnaz Koupaee and Divyakant Agrawal |
| | Paper ID: | Title: Evaluating the DTLS Protocol from CoAP in Fog-to-Fog Communications<br>Authors: Ramão Tiago Tiburski, Everton de Matos and Fabiano Hessel |
| 11:00am-11:15am | Tea Break | |

| 11:15am-12:30pm | Session #6 | Session Title: Edge and Fog Computing |
| --- | --- | --- |
| | Session Chair | Stephan Reiff-Marganiec, UK |
| | Paper ID: | Title: Edge and Fog Computing: Vision and Research Challenges (invited Paper)<br>Authors: Schahram Dustdar, Cosmin Avasalcai and Ilir Murturi |
| | Paper ID: | Title: Semantic IoT Data Description and Discovery in IoT-Edge-Cloud Infrastructure (invited Paper)<br>Authors: Wenxi Zeng, Shuai Zhang, I-Ling Yen, Farokh B. Bastani |
| 12:30pm-1:30pm | | Lunch |
| 1:30am -2:20pm | Keynote Session | Keynote Speaker: Fan-Jing Meng, IBM Research, China<br>Topic: Cognitive Cloud/IT Operations and Management in Real World |
| | Session Chair | Guido Wirtz, University of Bamberg, Germany |
| 2:20pm-2:30pm | | Break |
| 2:30pm -4:00pm | Session #7 | Session Title: Work-in-Progress |
| | Session Chair | Paul Townend, UK |
| | Paper ID: | Paper Title: Deep Reinforcement Learning based Service Migration Strategy for Edge Computing<br>Authors: Zhipeng Gao, Qidong Jiao, Kaile Xiao, Qian Wang, Zijia Mo and Yang Yang |
| | Paper ID: | Paper Title: Service Mesh: Challenges, State of the Art, and Future Research Opportunities<br>Authors: Wubin Li, Yves Lemieux, Jing Gaoy, Zhuofeng Zhaoy and Yanbo Han |
| | Paper ID: | Paper Title: Architecture-based Dynamic Evolution Runtime Environment (ADERE) for Service-based Systems<br>Authors: Mohammad Abu Matar, Fatma Mohamed, Rabeb Mizouni and    Zaid Almahmoud |
| 4:15pm -4:30pm | | Tea Break |
| 4:30pm -5:15pm | Panel Session | Panel Title: Ai Testing and Automation - Challenges, Issues, and Needs |
| | Moderator | Marc Roper, University of Strathclyde, UK |
| | | Panelists: Jerry Gao, Franz Wotawa, Hong Zhu, and ZhiQuan (George) ZHOU |
| 5:15pm -6:30pm | Session #8: | Session Title: Blockchain System Design and Engineering |

| | Session Chair | Xiaoying Bai and Chuanqi Tao |
|---|---|---|
| | Paper ID: | Title: The Scalability Challenge of Ethereum: An Initial Quantitative Analysis |
| | | Authors: Mirko Bez, Giacomo Fornari, and Tullio Vardanega |
| | Paper ID: | Title: Designing Strategies for Financial Blockchains with Smart Contracts |
| | | Authors: Wei-Tek Tsai |
| | Paper ID: | Title: Blockchain System Engineering - A PFMI Viewpoint |
| | | Authors: Xiaoying Bai, Wei-Tek Tsai and Xiaofang Jiang |
| 6:30pm-7:30pm | Dinner Break | |
| 7:30pm-9:00pm | 2020 IEEE Joint Conference Planning Meeting II – (Seminar II) | |

| 4/8/2019 - Conference Day 2 | | Location: Grand Ballroom 4 |
|---|---|---|
| **The First IEEE International Conference on Artificial Intelligence Testing (IEEE AITest 2019)** | | |
| 7:30am -8:50am | Breakfast | |
| 8:00am -5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am -9:35am | Keynote Session | Keynote Speaker: Franz Wotawa, Professor, Graz University of Technology, Austria<br>Title: AI-based AI-testing |
| | Session Chair | Hong Zhu, Oxford Brookes University, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | Session #5 | AI Testing |
| | Session Chair | Hong Zhu, Oxford Brookes University, UK |
| | Paper ID: | Title: Deploying Smart Program Understanding on a Large Code Base |
| | | Authors: Carlo Ieva, Arnaud Gotlieb, Souhila Kaci and Nadjib Lazaar |
| | Paper ID: | Title: AI for Testing Today and Tomorrow: Industry Perspectives |
| | | Authors: Tariq King, Jason Arbon, Dionny Santiago, David Adamo, Wendy Chin and Ram Shanmugam |

| | Paper ID: | Title: Behavior Pattern-Driven Test Case Selection for Deep Neuron Networks(short) |
|---|---|---|
| | | Authors: Yanshan Chen, Ziyuan Wang and Dong Wang |
| 11:00am -11:15am | Tea Break | |
| 11:15am -12:30pm | Session #6 | Machine Learning and Clustering Algorithm |
| | Session Chair | Marc Roper, University of Strathclyde, UK |
| | Paper ID: | Title: Statistically Rigorous Testing of Clustering Implementations |
| | | Authors: Xin Yin, Vincenzo Musco, Iulian Neamtiu and Usman Roshan: |
| | Paper ID: | Title: Using Machine Learning to Classifying Test Outcomes(short) |
| | | Authors: Marc Roper |
| | Paper ID: | Title: Challenges of software testing of machine learning based systems(short) |
| | | Authors: Dusica Marijan, Arnaud Gotlieb and Mohit Ahuja |
| 12:30pm-1:30pm | Lunch | |
| 1:30am -2:20pm | Session ID | Keynote Speaker: Fan-Jing Meng, IBM Research, China |
| | | Topic: Cognitive Cloud/IT Operations and Management in Real World |
| | Session Chair | Guido Wirtz, University of Bamberg, Germany |
| 2:20pm-2:30pm | Break | |
| 2:30pm -4:00pm | Special Track 1 | Session Title: AI in Security Testing |
| | Session Chair | Sebastien Bardin |
| | Paper ID: | Title: Test-driven Anonymization for Artificial Intelligence |
| | | Authors: Cristian Augusto, Jesús Morán, Claudio De La Riva and Javier Tuya |
| | Paper ID: | Title: An Analytical Framework for Security-Tuning of Artificial Intelligence Applications Under Attack |
| | | Authors: Koosha Sadeghi, Ayan Banerjee and Sandeep Gupta |
| | Paper ID: | Title: Variable Strength Combinatorial Coverage Criteria for Deep Neuron Networks(short) |
| | | Authors: Ziyuan Wang, Yanshan Chen and Dong Wang |
| 4:15pm-4:30pm | Tea Break | |

| | | |
|---|---|---|
| 4:30pm-5:15pm | Panel Session | Title: AI Testing Panel - Ai Testing and Automation - Challenges, Issues, and Needs |
| | Moderator | Marc Roper, University of Strathclyde, UK |
| | | Panelists: Jerry Gao, Franz Wotawa, Hong Zhu, and ZhiQuan (George) ZHOU |
| 5:15pm-6:30pm | Special Track 2 | Session: AICstva: Constraint Solvers in Software Testing, Verification and Analysis |
| | Session Chair | Justin Pearson and Philip Rummer |
| | Paper ID: | Title: Stress Testing of Single-Arm Robots Through Constraint-Based Generation of Continuous Trajectories |
| | | Authors: Mathieu Collet, Arnaud Gotlieb, Nadjib Lazaar, Morten Mossige |
| | Paper ID: | Title: Constraint-Based Testing of An Industrial Multi-Robot Navigation System |
| | | Authors: Clemens Mühlbacher, Gerald Steinbauer, Michael Reip and Stephan Gspandl |
| | Paper ID: | Title: Dedicated search strategies for identifying critical counterexamples on programs with floating point computations(short) |
| | | Authors: Michel Rueher |
| 6:30pm-7:30pm | Dinner Break | |
| 7:30pm-9:00pm | 2020 IEEE Joint Conference Planning Meeting II – (Seminar II) | |

| 4/9/2019 - Conference Day 3 | | Location: Grand Ballroom 3 |
|---|---|---|
| **The Fifth IEEE International Conference On Big Data Service and Applications (IEEE BigDataService 2019)** | | |
| 8:50am -9:35am | Keynote Session | Keynote Speaker: Dr. ZhiQuan (George) ZHOU, University of Wollongong, Australia |
| | | Topic: Topic: Automated testing of real-life self-driving systems and beyond |
| | Session Chair | Marc Roper, University of Strathclyde, UK |
| 9:35am - 9:45am | | **Break** |
| 9:45am -11:00am | WIP Session | Work In Progress I                         Location: Ballroom 3 and 4 |
| | Session Chair | Chuanqi Tao, Nanjing University of Aeronautics and Astronautics |
| | Paper ID: 88 | Title: A Framework for Integrating Big Data Security into Agricultural Supply Chain |
| | | Authors: A. Gawanmeh, S. Parvin, S. Venkatraman, T. De Souza-Daw, J. Kang, Samuel Kaspi, and Joanna Jackson |
| | Paper ID: 90 | Title: Towards a Parallel Constraint Solver for Cloud Computing Environment |
| | | Authors: Tarek Menouer, Nitin Sukhija and Patrice Darmon |
| | Paper ID: 57 | Title: From Data to Deployment: Building an End-to-end Hybrid Book Recommendation System |
| | | Authors: Doruk Kilitcioglu, Nick Greenquist and Anasse Bari |
| 11:15am-12:30pm | | **Concurrent Session** |
| | Invited Paper Session | Big Data Invited Paper Session                         Location: Ballroom 3 and 4 |
| | Session Chair | Taghi Khoshgoftaar, Florida Atlantic University |
| | Paper ID: 89 | Investigating Random Undersampling and Feature Selection on Bioinformatics Big Data |
| | | Tawfiq Hasanin, Taghi M. Khoshgoftaar, Joffrey Leevy, and Naeem Seliya |
| | Paper ID: 90 | Maxout Neural Network for Big Data Medical Fraud Detection |
| | | Gabriel Castaneda, Paul Morris, Taghi M. Khoshgoftaar |
| 11:15am-12:30pm | WIP Session | Work In Progress II                         Location: Ballroom 1B |

| | Session Chair | Jerry Gao, San Jose State University |
|---|---|---|
| | Paper ID: 60 | Title: A Meaningful Visually Secure Image Encryption Scheme |
| | | Authors: Ping Ping, Jie Fu, Zeyu Gao and Yingchi Mao |
| | Paper ID: 67 | Title: Stock Price Prediction using News Sentiment Analysis |
| | | Authors: Saloni Mohan, Sahitya Mullapudi, Sudheer Sammeta, Parag Vijayvergia and David Anastasiu |
| | Paper ID: 89 | Title: Discrimination of Improved Cross-correlation Function to Determine Speaker Location from Microphone Array |
| | | Authors: Lixia Huang, Suisui Zhang, Jie Wang and Xueying Zhang |
| 12:30pm-1:30pm | **Lunch** | |
| 1:30pm - 8:00pm | **Local Bus Tour (Free with One Tour Ticket)** | |

| **4/9/2019 - Conference Day 3**                  **Location: Grand Ballroom 1B** <br> **- First IEEE International Conference on Artificial Intelligence Testing (IEEE AITest 2019)** | | |
|---|---|---|
| 8:00am-8:50am | **Breakfast** | |
| 8:00am-11:00am | **IEEE Joint Conference and Workshop Registration** | |
| 8:50am -9:35am | Keynote Session | Keynote Speaker: Dr. ZhiQuan (George) ZHOU, University of Wollongong, Australia |
| | | Topic: Automated testing of real-life self-driving systems and beyond |
| | Session Chair | Marc Roper, University of Strathclyde, UK |
| 9:35am - 9:45am | **Break** | |
| 9:45am -11:00am | Special Track 3 | Session Title: AIMet: AI and Metamorphic Testing |
| | Session Chair | George Zhou, University of Wollongong, Australia |
| | Paper ID: | Title: Metamorphic Testing for Quality Assurance of Protein Function Prediction Tools |
| | | Authors: Morteza Pourreza Shahri, Madhusudan Srinivasan, Gillian Reynolds, Diane Bimczok, Indika Kahanda, Upulee Kanewala |
| | Paper ID: | Title: Datamorphic Testing: A Method for Testing Intelligent Applications |

| | | Authors: Hong Zhu, Dongmei Liu, Ian Bayley, Rachel Harrison and Fabio Cuzzolin |
|---|---|---|
| | Paper ID: | Title: Fault Detection Effectiveness of Metamorphic Relations Developed for Testing Supervised Classifiers |
| | | Authors: Prashanta Saha and Upulee Kanewala |
| 11:00am -11:15am | | **Tea Break** |
| 12:30pm- 1:30pm | | **Lunch** |
| 1:30pm - 8:00pm | | **Local Bus Tour (Free with One Tour Ticket)** |

| 4/9/2019 - Conference Day 3 - IEEE SOSE2019                  Room: Grand Ballroom 1A<br>**Thirteenth IEEE International Conference on Service-Oriented System Engineering (IEEE SOSE2019)** | | |
|---|---|---|
| 7:30am-8:50am | | **Breakfast** |
| 8:00am -11:00am | | **IEEE Joint Conference Registration** |
| 8:50am - 9:35am | Keynote Session | Keynote Speaker: Dr. ZhiQuan (George) ZHOU, University of Wollongong, Australia |
| | | Topic: Automated testing of real-life self-driving systems and beyond |
| | Session Chair | Marc Roper, University of Strathclyde, UK |
| 9:35am - 9:45am | | Break |
| 9:45am -11:00am | Session #9 | Performance and Scalability |
| | Session Chair | Guido Wiritz, |
| | Paper ID | Paper Title: Improving Data Center Efficiency Through Holistic Scheduling In Kubernetes (invited paper) |
| | | Authors: Paul Townend, Stephen Clement, Dan Burdett, Renyu Yang, Joe Shaw, Brad Slater and Jie Xu |
| | Paper ID | Paper Title: The Scalability Challenge of Ethereum: An Initial Quantitative Analysis |
| | | Authors: Mirko Bez, Giacomo Fornari, and Tullio Vardanega |
| 11:00am -11:15am | | **Tea Break** |
| 11:15am -12:30pm | Session #10 | Cloud Services |
| | Session Chair | Hong Zhu, Oxford Brookes University, United Kingdom |

| | Paper ID | Title: Container-based Module Isolation for Cloud Services |
|---|---|---|
| | | Authors: Stefan Kehrer, Florian Riebandt and Wolfgang Blochinger |
| | Paper ID | Title: Cloud Service Provider Evaluation System using Fuzzy Rough Set Technique |
| | | Authors: Parwat Singh Anjana, Priyanka Badiwal, Rajeev Wankar, Swaroop Kallakuri and C. Raghavendra Rao |
| 12:30pm-1:30pm | Lunch | |
| 1:30pm - 8:00pm | Local Bus Tour (Free with One Tour Ticket) | |

| 4/9/2019 - Conference Day 3 Location: Grand Ballroom 1C - IEEE International Workshop on Medical and Healthcare Using Big Data Technologies (MHBDT 2019) | | |
|---|---|---|
| 7:30m-8:50am | Breakfast | |
| 8:00am–5:00pm | IEEE Joint Conference and Workshop Registration | |
| 8:50am -9:35am | Keynote Session | Keynote Speaker: Dr. ZhiQuan (George) Zhou, University of Wollongong, Australia |
| | | Topic: Automated testing of real-life self-driving systems and beyond |
| | Session Chair | Marc Roper, University of Strathclyde, UK |
| 9:35am - 9:45am | Break | |
| 9:45am -11:00am | Session #3 | **Deep Learning on Precision Medicine** |
| | Session Chair | Xuying Zhang, Taiyuan University of Technology |
| | Paper ID:15 | Title: Automated Heartbeat Classification Based on Convolutional Neural Network with multiple kernel size |
| | | Authors: Haotian Shi, Haoren Wang, Yanrui Jin, Liqun Zhao and Chengliang Liu |
| | Paper ID:16 | Title: A High-Precision Arrhythmia Detection Method Based on Biorthogonal Wavelet and Fully Connected Neural Network |
| | | Authors: Haoren Wang, Haotian Shi, Ke Lin, Zhao Liqun and Chengliang Liu |
| | Paper ID:18 | Title: A Multi-Feature Fusion and SSAE-Based Deep Network for Image Semantic Recognition |
| | | Authors: Haifang Li, Zhe Wang, Guimei Yin, Hongxia Deng, Xiaofeng Yang, Rong Yao, Peng Gao and Rui Cao |

| 11:00am -1:15am | Tea Break | |
|---|---|---|
| 11:15am-12:30pm | Session #4 | **Machine Learning in Medical and Healthcare** |
| | Session Chair | Richard Quan, President, Chivalry Health Inc. |
| | Paper ID:77 | Title: Signal Processing for Diffuse Correlation Spectroscopy with Recurrent Neural Network of Deep Learning |
| | | Authors: Peng Zhang, Zhiguo Gui, Hao Ling, Xiaojuan Zhang, Caicai Liu and Yu Shang |
| | Paper ID:41 | Title: Design and Development of a Mobile EEG Data Analytics Framework |
| | | Authors: Luis Gutierrez and Mohammad Iftekhar Husain |
| | Paper ID:81 | Title: Artificial Intelligent (AI) Clinical Edge for Voice disorder Detection |
| | | Authors: Chandrasekar Vuppalapati, Anitha Ilapakurti, Jaya Shankar Vuppalapati, Santosh Kedari and S. Kedari |
| 12:30pm-1:30pm | Lunch | |
| 1:30pm -8:00pm | Local Bus Tour (Free with One Tour Ticket) | |