Time	Room 3			Room 8		
	Monday, March 26th – Workshop Day					

Monday, March 26th – Workshop Day

Time	Room 3			Room 8		
09:30– 11:15	**JCC Joint Cloud Workshop Session I** **Session Chair: Yijie Wang**					
	Workshop Introduction		Donggang Cao			
	JCC-01	Transaction-aware SSD Cache Allocation for the Virtualization Environment	Zhen Tang			
	JCC-02	TZ-KMS: A Secure Key Management Service for Joint Cloud Computing with ARM TrustZone	Shiyu Lou			
	JCC-03	Secure and Efficient In-Hypervisor Memory Introspection Using Nested Virtualization	Weiwen Tang			
11:15 – 11:30	Coffee Break					
11:30 – 13:00	**JCC Joint Cloud Workshop Session II** **Session Chair: Tianyu Wo**			**Big Data Security Workshop I** **Session Chair: Euijin Choo**		
	JCC-04	DwarfGC: A Space-efficient and Crash-consistent Garbage Collector in NVM for Cloud Computing	Heting Li	BDS-06	Parallelizing Deep Packet Inspection on GPU	Meera Ramesh and Hyeran Jeon.
	JCC-05	Cuckoo Migration: Self Migration on JointCloud Using New Hardware Features	Ruifeng Liu	BDS-02	A Lightweight and Transparent Compensation Mechanism for Fog-Cloud Storage Framework	Donghyun Kim, **Euiseong Ko**, Junggab Son, Yeojin Kim and Jungtaek Seo.
	JCC-06	PoPF: a consensus algorithm for JCLedger	Peichang Shi	BDS-03	Efficiently Validating Aggregated IoT Data Integrity	Nesrine Kaâniche, Eunjin Jung and **Ashish Gehani**
13:00– 14:00	Lunch break (Conference)					
14:00 – 16:00	**JCC Joint Cloud Workshop Session III** **Session Chair: Haibo Mi**			**Big Data Security Workshop II** **Session Chair: Younghee Park**		
	JCC-07	A Scalable Internet-of-Vehicles Service	Mingming Zhang	BDS-04	Securing GPR data for Use in Smart	**Hector Suarez**, Li Yang

		over Joint Clouds			Cities	and Dalei Wu
	JCC-08	IoT Service Based on JointCloud Blockchain: The Case Study of Smart Travelling	Weili Chen	BDS-05	Analyzing Opinion Spammers' Network Behavior in Online Review Systems	**Euijin Choo**
	JCC-09	What makes a great Mobile App? A quantitative study using a new mobile crawler	Zexun Jiang	BDS-01	Log-Based Cloud Monitoring System for OpenStack	Vaibhav Agrawal, Devanjal Kotia, Kamelia Moshirian and **Mihui Kim**
	JCC-10	HCFS2: A File Storage Service with Weak Consistency in the Hybrid Cloud	Jie Sun	BDS-07	Classification of Attack Types for Intrusion Detection Systems using Machine Learning Algorithm	**Kinam Park**, Youngrok Song and Yun-Gyung Cheong
16:00 – 16:15	Coffee break					
16:15– 18:00	**JCC Joint Cloud Workshop Session IV** **Session Chair: Peichang Shi**			**Big Data Security Workshop III** **Session Chair: Mihui Kim**		
	JCC-11	A Case of Automatically Deploying and Scaling Out Distributed Systems on the Cloud from Scratch	Yehong Zong	BDS-08	Applying Artificial Immune System for Intrusion Detection	Daniel Hooks, **Xiaohong Yuan**, Kaushik Roy, Albert Esterline and Joaquin Hernandez
	JCC-12	Comparing Container-based Microservices and Workspace as a Service: Which One to Choose?	Junming Ma	BDS-09	Picture PassDoodle: Usability Study	**David Schwab**, Lama Alharbi, Oliver Nichols and Li Yang
	JCC-13	A Cluster Feature based Approach for QoS Prediction in Web Service Recommendation	Haibao Mi		*Workshop Closing*	
	Workshop Closing					
19:30 – 21:00	*Bamberg@Night Walk* (Meeting Point: Lobby Welcome Hotel)					

Time	Room 6/7			Room 3			Room 8		
				Tuesday, March 27th					
09:00– 09:30	**Room 6/7 Opening Session**								
09:30 – 10:30	**Keynote 1: Prof. Dr. Holger Giese** (Hasso Plattner Institute, Potsdam, Germany): **How Models lead from Software Evolution to Self-Adaptive Software and Runtime Models.** **Session Chair:** Guido Wirtz								
10:30 – 10:45	Coffee Break								
10:45 – 12:15	**Big Data Session I** **Session Chair:** Jie Xu			**Mobile Cloud Session I** **Session Chair:** Toru Kobayashi			**SOSE Session I** **Session Chair:** Jerry Gao		
	12	A Mining and Visualizing System for Large-scale Chinese Technical Standards	**Chenwei Lu**, Deqing Wang, Xin Liu and **Keqin Gan**	17	Profiling Energy Efficiency of Mobile Crowdsensing Data Collection Frameworks for Smart City Applications	Mattia Tomasoni, **Andrea Capponi,** et al.	SF-05	Evaluation of Server Push Technologies for Scalable Client-Server Communication	Elton F. de S. Soares, **Raphael Melo Thiago**, Leonardo Guerreiro Azevedo, Maximilien de Bayser et al.
	32	Key-value Pairs Allocation Strategy for Kinetic Drives	**Hebatalla Eldakiky** and David Du	12	Next Generation Telecommunications Computing Architecture (NexTCA)	**Tai-Hua Hsiao**, Chilung Wang and Peng-Kai Hsu.	SF-04	Overcoming Security Challenges in Microservice Architectures	Tetiana Yarygina and **Anya Helene Bagge**
	10	Potential Malicious Insiders Detection Based on a Comprehensive Security Psychological Model	Guang Yang, Lijun Cai, Aimin Yu and Dan Meng (Video presentation)				SF-06	An Approach for Extracting the Architecture of Microservice-Based Software Systems	**Benjamin Mayer**
12:15 – 13:15	Lunch break (Conference)								
13:15– 15:15	**Big Data Session II** **Session Chair:** Younghee Park			**Mobile Cloud Session II** **Session Chair:** Cristian Borcea			**SOSE Visionary Track I** **Session Chair:** Fan Jing Meng		
	30	A Generalized Service Infrastructure for Data Analytics	**Jan Frenzel**, Yedhu Sastri, Christoph Lehmann, Taras Lazariv, René Jäkel and Wolfgang E.	15	Elastic Provisioning of Internet of Things Services using Fog Computing: an Experience Report	Alessandro Zanni, **Ulf Jennehag,** et al.	VT-11	MQTT-Driven Node Discovery for Integrated IoT-Fog Settings Revisited: The Impact of Advertiser Dynamicity	Riccardo Venanzi, Burak Kantarci **Luca Foschini**, Paolo Bellavista Senior

						Nagel			
	45	Scheduling Big Data Workflows in the Cloud under Deadline Constraints	**Mahdi Ebrahimi**, Aravind Mohan and Shiyong Lu	21	Towards Intelligent Edge Storage Management: Determining and Predicting Mobile File Popularity	**Ali Elgazar**, Mohammad Aazam, Khaled Harras and Abderrahman Mtibaa.	VT-10	Service-Oriented IoT Modeling and its Deviation from Software Services	**I-Ling Yen**, Farokh Bastani, Wei Zhu, San-Yih
	16	Performance Characterization of Spark Workloads on Shared NUMA Systems	**Shuja-Ur-Rehman Baig**, Marcelo Amaral, Jordà Polo and David Carrera	10	An Efficient Dynamic Offloading Approach based on Optimization Technique for Mobile Edge Computing	**Kai Guo**, Mingcong Yang, **Yongbing Zhang** and Yusheng Ji.	VT-06	Testing IoT Systems	**Jeff Voas**, Rick Kuhn, Phil Laplante
	6 4	Performance Comparison of a SDN Network between Cloud-Based and Locally Hosted SDN Controllers	**Muhammad Younas** and Kashinath Basu				VT-09	Quality Assurance Problems and Challenges for AI Systems and Unstructured Big Data	**Jerry Gao**, Shengqang Lu, Penchen Zhang
15:15 – 15:30	Coffee break								
	Big Data Session III Session Chair: Xiaohui Yuan			**Mobile Cloud Session III** Session Chair: Luca Foschini			**SOSE Session II** Session Chair: Jie Xu		
15:30 – 17:30	61	Seismic Data Classification using Machine Learning	Wenrui Li and **Jerry Gao**	34	Design and Implementation of an OpenFlow-based TCP SYN Flood Mitigation	Ryosuke Nagai, Wataru Kurihara, Shun Higuchi and **Toshio Hirotsu.**	SO-1	Semantic Integration of System Specifications to Support Different System Engineering Disciplines	**Alexander Rauh**, Stefan Queins and Wolfgang Golubski
	31	Twitter Usage Across Industry: A Spatiotemporal Analysis	**Neha Gupta**, Henry Crosby, David Purser, Stephen Jarvis and Weisi Guo	11	Comparing Network Performance of Mobile VoIP Solutions	**Rafael Dantas,** Chris Exton and Andrew Le Gear.	SO-3	Comparing Imperative and Declarative Process Models with Flow Dependencies	**Michaela Baumann**
	58	Scientific Users' Interest Detection and Collaborators	Guanyao Du, Yuchun Liu and **Jianjun Yu**	18	On the deployment of an open-source, 5G-aware evaluation	Luis Tomas Bolivar, **Christos**	SO-4	Supporting Coordination in Crowdsourced Software Testing Services	**Manar Alsayyari** and Sultan Alyahya

		Recommendation		testbed	**Tselios**, et al.	
	51	A Framework for Analyzing Big Social Data and Modelling Emotions in Social Media	Isidoros Perikos and Ioannis Hatzilygeroudis (Video presentation)			

Time	
18:30 – 19:45	Reception (Conference, Plückers Restaurant)
20:00 – 21:30	Bamberg@Night Walk (Meeting Point: Lobby Welcome Hotel)

Wednesday, March 28th								
Time	Room 6/7			Room 3			Room 8	
09:00 –10:00	Room 6/7: **Keynote 2: Prof. Dr. Cristian Borcea** (New Jersey Institute of Technology, Newark, USA): **Distributed Mobile Cloud Computing with Avatars** Session Chair: Peter Ruppel							
10:00 – 10:15	Coffee Break							
10:15 – 12:15	**Big Data Session IV** Session Chair: Muhammad Younas			**Mobile Cloud Session IV** Session Chair: Hiroyuki Sato			**SOSE Session III** Session Chair: Jörg Lenhard	
	26	From Photos to Travel Itinerary: A Tourism Recommender System for Smart Tourism Destination	**Mickael Figueredo**, José Lucas Ribeiro, Nélio Cacho, Antônio Thomé, Andrea Cacho, Frederico Lopes and Valéria Araújo	29	User Preference Recommendation on Mobile Car Parking Application	**Benjawan Srisura**, Charoenkeith Wan et al.	SF-1	VTDL: A Notation for Data Stream Processing Applications	Christoph Hochreiner, **Stefan Schulte**, Schahram Dustdar, et al.
	20	HTARF: A Hybrid Tourist Attraction Recommendation Framework for Trip Scheduling	**Yuanfeng Gong**, Yushun Fan, Bing Bai, Junqi Zhang, Zhenfeng Gao and Xing Wu	26	Device-Specific Linux Kernel Optimization for Android Smartphones	Pengfei Yuan, **Yao Guo**, Xiangqun Chen and Hong Mei.	SF-2	A data distribution service for cloud and containerized storage based on information dispersal	Miguel Ángel Santiago Durán, José Luis González Compeán and **Victor J. Sosa-Sosa**
	23	ASSR:An Adjustable Scenic Spot Rating System Based on Travel Note Mining	**Xiaowen Mei**, Yushun Fan, Junqi Zhang, Bing Bai and Zhenfeng Gao	14	Runtime Computation of Optimal Offloading Scheduling	**Andrea Morichetta,** Barbara Re and Francesco Tiezzi.	SF-3	A Hybrid Approach for Predicting Aging-Related Failures of Software Systems	**Jingwei Li**, Yong Qi and Lin Cai

	63	Visual analysis of sensor logs in smart spaces: Activities vs. situations	**Francesco Leotta**, Massimo Mecella and Daniele Sora	13	Experimental Study of Video Fusion for Multi-View Video Streaming in Mobile Media Cloud	Jie Wang, **Shuquan Yang**, Weizhan Zhang, Junquan Liu, Xie Kong and Qinghua Zheng.	SF-7	An Ensemble Signature-based Approach for Performance Diagnosis in Big Data Platform	**Hong Kou**
12:15 – 13:15	Lunch break (Conference)								
13:15 – 15:15	**Big Data Session V** Session Chair: Muhammad Younas			**Mobile Cloud Session V** Session Chair: Andrea Capponi			**Big Data Session VI** Session Chair: Xiaohui Yuan		
	59	A Relationship Between Fines and Violent Crimes	**Samuel Smith**, Kedar Gangopadhyay, Simranjyot Singh Gill and Suzanne McIntosh	24	Collaborative Offloading for Distributed Mobile-Cloud Apps	Hillol Debnath, **Cristian Borcea** et al.	46	Back to the Bazaar: destructuring the Data Mall	**Massimo Marchiori**
	1	An Evacuation Management framework based on urban data & personalized mobility information	Alexandros Zamichos, Traianos Theodorou, Anastasios Drosou and **Dimitrios Tzovaras**	19	A Generalized Nash Game for Mobile Edge Computation Offloading	**Daniel Nowak**, Tobias Mahn, et al.	38	Smart City Data Storage Optimization in the Cloud	**Aseel Alkhelaiwi** and Dan Grigoras
	42	Macroscopic Patterns in Sparse Location Data: Identifying Mobility Prototypes	**Bianca Katharina Lüders** and **Peter Ruppel**	31	CU Flipped Smart Application: A Learning Tool for 21st Century Learners	**Jintavee Khlaisang**	8	A Home Rehabilitation Comprehensive Care System for Patients with COPD Based on Comprehensive Care Pathway	Guanzhong Yang, **Chuifeng Kong** and Qinpeng Xu
	33	Smart City architecture for data ingestion and analytics: processes and solutions	Paolo Nesi, Pierfrancesco Bellini, **Michela Paolucci** and Imad Zaza				29	NDN Log Analysis using Big Data Techniques: NFD Performance Assessment	**Junior Dongo**, Charif Mahmoudi and Fabrice Mourlin
15:15 – 15:30	Coffee break								
15:30 – 17:30	**Big Data Session VII**			**Mobile Cloud Session VI (Poster)**			**SOSE Visionary Track II**		

		Session Chair: Stefan Kolb			Session Chair: Peter Ruppel			Session Chair: Hong Zhu	
	48	Micro-blog Friend-Recommendation Based on Topic Analysis And Circle Found	**Jidi Wang**, Shengxiang Gao, Li-Ren Wang and Zhengtao Yu	33	SNS Agency Robot for Elderly People Realizing Rich Media Communication	**Toru Kobayashi,** Koushin Kuriyama et al.	VT-08	Detecting present events to predict future: Detection and evolution of events on Twitter	Muhammad Ali Yousuf, **Lu Liu**, Mohsen Farid;
	53	A Fast and Accurate Retina Image Verification Method based on Structure Similarity	**Xiaohui Yuan**, Tian Chen, Wencheng Wang and Lichuan Gu.	35	F2C-Aware: Enabling discovery in Wi-Fi-powered Fog-to-Cloud (F2C) systems	**Zeineb Rejiba,** Xavi Masip-Bruin, et al.	VT-02	Adaptive Policy Evaluation Framework for Flexible Service Provision	**Sato, Hiroyuki** Tanimoto, Shigeaki Kobayashi, Toru Kanai
	14	The Secure Vehicle-to-Vehicle and Vehicle-to-Group Communication Mechanisms in Smart City	**Hua Yi Lin**, Meng-Yen Hsieh and Kuan-Ching Li				VT-01	Intelligent Resource Scheduling at Scale: a Machine Learning Perspective	Renyu Yangand and **Jie Xu**
	15	Single Neuron PID Control of Agricultural Robot Steering System Based on Online Identification	Jiao Jun, Chen Jing, Qiao Yan, Wang Wenzhou, Wang Chao and Gu Lichuan						
17:30 – 18:15	*Room A: Planning Session for 2019 Conferences*								
19:00 – 22:00	*Conference Dinner*								

Thursday, March 29th							
Time	**Room 6/7**		**Room 3**		**Room 8**		
09:00 – 10:00	**Room 6/7: Keynote 3 (planned): Prof. Dr. Wei-Tek Tsai** (Beihang University, Beijing, China/Arizona State University, Phoenix, USA): **TBA** **Session Chair:** Xiahui Yuan						
10:00 – 10:15	Coffee Break						
10:15 – 12:15	**Big Data Session VIII** **Session Chair:** Guido Wirtz		**Big Data Session IX** **Session Chair:** tba		**SOSE Visionary Track III** **Session Chair:** Jörg Lenhard		
	5	From data points to ampacity forecasting: Gated Recurrent Unit networks	**Nicholas Popovic**, Gabriela Molinar and Wilhelm Stork	44	Reducing data stream complexity by applying Count-Min algorithm and discretization procedure	Sabina Šišović, **Marija Brkic Bakaric** and Maja Matetic	VT-03	Traffic Differentiation on Internet of Things	Thiago Garrett, **Schahram Dustdar,** Luis C. E. Bona, Elias P. et al.
	18	Authoritative Prediction of Website Based on Deep Learning	**Haihua Yang** and Yangde Feng	28	A novel Split-merge-evolve k clustering algorithm	Mingxue Wang, Vincent Huang and **Anne-Marie Cristina Bosneag**	VT-05	If Docker is the answer, what is the question? — A case for software engineering paradigm shift toward service agent organization	**Hong Zhu**, Ian Bayley
	13	A Novel Method of Overrun Risk Measurement and Assessment using Large Scale QAR Data	Hao Lv, Jianjun Yu and **Tongyu Zhu**	62	Knee/Elbow estimation based on first derivative threshold	**Mário Antunes**, Diogo Gomes and Rui Aguiar	VT-04	Opportunities and Challenges Towards Cognitive IT Service Management in Real World	**Fan Jing Meng**, Jingming Xu, Xiao Zhang, Lin Yang1, Yuan Wang, Xiaoxi Liu, et al.
				57	Word Network Topic Model Based on Word2Vector	**Mingyi Jiang**, **Rui Liu** and Fei Wang			
12:15 – 13:15	Lunch break (Conference)						
13:15 – 13:30	Closing Session – End of Conference						