

IC2E/IoTDI 2018 Program

Date	Time	Room					
		Challenger 40-41 Level 3	Challenger 38-39 Level 3	Columbia 37 Level 3	Columbia 36 Level 3	Columbia 34 Level 3	Plaza Int'l Ballroom G Convention Level
Tuesday, April 17, 2018	8:30 – 10:00pm	<p>IC2E Workshop 1 (Globe-IoT)</p> <p>Opening remarks</p> <p><i>Keynote 1: "High-Level Interoperability in IoT"</i> Damla Turgut, University of Central Florida</p>	<p>IC2E Workshop 2 (Container)</p> <p>Opening remarks</p> <p><i>Keynote: "Container Security"</i> Salman Baset</p>	<p>IC2E Tutorial 1 (Blockchain)</p>	<p>IoTDI Workshop 1 (SocialSens)</p> <p>8:30 AM - 8:45 AM <i>Opening:</i> Timothy P Hanratty, ARL</p> <p>8:45 AM - 10:00 AM <i>Keynote Talk: "Understanding and Engineering Social Signals: A Network- and Data-Driven Perspective"</i> Prof. Radu Marculescu, Carnegie Mellon University</p>	<p>IoTDI Workshop 2 (IoTSec)</p> <p>8:30 AM – 8:45 AM <i>Welcome Remarks</i></p> <p>8:45 AM – 9:45 AM <i>Keynote: "The Role of Modeling and Simulation in IoT Security Research"</i> Prof. David M. Niwl, University of Illinois at Urbana-Champaign</p> <p>9:45 AM – 10:00 AM <i>Q & A</i></p>	
	Coffee Break						
	10:30 – 12:00pm	<p>IC2E Workshop 1 (Globe-IoT: Development Methodologies)</p> <p>A Metamodel Framework for Edge-based Smart Environments Authors: Franco Cicirelli, Giancarlo Fortino, Antonio Guerieri, Alessandro Mercuri, Giandomenico Spezzano and Andrea Vinci</p> <p>Micro-intelligence for the IoT: SE Challenges and Practice in LPaaS Authors:Roberta Calegari, Giovanni Ciatto, Stefano Mariani, Enrico Denti and Andrea Omicini</p> <p>CoAP-XED: Enabling Relaxed Requests to IoT Sensing Resources Authors: Bruno Costa, Paulo Pires and Flavia Delicato</p>	<p>IC2E Workshop 2 (Container)</p> <p><i>Containerizing for heterogeneous HPC applications in the Cloud</i> Authors: Malik Khan and Anne C. Elster</p> <p><i>Container-based Performance Evaluation: A Survey and Challenges</i> Authors: Naylor G. Bachiega, Paulo S. L. Souza, Sarita M. Bruschi and Simone Do R. S. de Souza</p> <p><i>Container Memory Allocation Discrepancies: An Investigation on Memory Utilization Gaps for Container-Based Application Deployments</i> Authors: Garrett Lahmann, Thom McCann and Wes Lloyd.</p>	<p>IC2E Tutorial 1 (Blockchain)</p>	<p>IoTDI Workshop 1 (SocialSens)</p> <p>Vision Discussions (Session Chair: Lu Su) 10:30 AM - 12:00 PM</p> <p><i>Operating in the New Information Environment: An Army Vision of Social Sensing?</i> Authors: Sue Kase and Elizabeth Bowman</p> <p><i>The Future of Deception: Machine-Generated and Manipulated Images, Video, and Audio?</i> Authors: Jonathan Bakdash, Char Sample, Monica Rankin, Murat Kantarcioglu, Jennifer Holmes, Sue Kase, Erin Zaroukian and Boleslaw Szymanski</p> <p><i>Veracity Enriched Event Extraction</i> Authors: Ning Yu and Graham Horwood</p> <p><i>Understanding Multi-stage, Multi-modal, Multimedia events in Social Media</i> Authors: Vadim Kagan and Siva Subrahmanian</p> <p><i>Improving Trustworthiness of Human Sensing Data via Open Data</i> Authors: Mikkel Kjærgaard, Fisayo Caleb Sangogboye, Anooshmita Das and Jens Hjort Schwee</p> <p><i>Design of Scalable IoT Platform using Hazard Sensor, Open and Social Data</i> Authors: Su-Seong Chai and Dongjun Suh</p> <p><i>Realizing the full potential of (infra-)structures for inter-agency communication before, during, and after disasters using the example of APAN (All Partners Access Network)</i> Authors: Ly Dinh and Jana Diesner</p>	<p>IoTDI Workshop 2 (IoTSec)</p> <p>Session I: Attacks and Defenses 10:30 AM – 10:50 AM <i>Yuan Gong and Christian Poellabauer. An Overview of Vulnerabilities of Voice Controlled Systems</i></p> <p>10:50 AM – 11:10 AM <i>Abhinav Mohanty, Islam Obaidat, Fadi Yilmaz and Meera Sridhar. Control-hijacking Vulnerabilities in IoT Firmware: A Brief Survey</i></p> <p>11:10 AM – 11:30 AM <i>Daniel Sanchez and Bogdan Copos. Cognitive Enhancement as an Attack Surface</i></p> <p>11:30 AM – 11:50 AM <i>Hui Lin. SDN-based In-network Honeypot: Proactively Disrupt and Mislead Attacks in IoT Network</i></p> <p>11:50 AM – 12:10 PM <i>Chen Cao, Le Guan, Peng Liu, Neng Gao, Jingqiang Lin and Ji Xiang. Hey, You, Keep away from My Device: Remotely Implanting a Virus Expeller to Defeat Mirai on IoT Devices</i></p>	
	Lunch Buffet (Room: Plaza International Ballroom G)						
	1:30 – 3:00pm	<p>IC2E Workshop 1 (Globe-IoT)</p> <p><i>Keynote 2: "IoT Software Services Provisioning over Fog-Cloud Systems"</i> Amir Taherkordi</p> <p>(Globe-IoT: Interoperability)</p> <p><i>Flow-based programming interoperability solution for IoT Platform Applications</i> Authors: Andreu Belsa Pellicer, David Sarabia Jácome, Carlos Enrique Palau Salvador and Manuel Esteve Domingo</p> <p><i>Towards a Resource Slice Interoperability Hub for IoT</i> Authors: Hong-Linh Truong</p> <p><i>A Methodology for Integrating Internet of Things Platforms</i> Authors: Claudio Savaglio, Giancarlo Fortino, Wilma Russo and Raffaele Gravina</p>	<p>IC2E Tutorial 2 (FECBench)</p>	<p>IC2E Workshop 3 (Blockchain)</p> <p>Welcome remarks</p> <p>(Blockchain: Improving Blockchain Technology)</p> <p><i>Supporting Private Data on Hyperledger Fabric with Secure Multiparty Computation.</i> Authors: Fabrice Benhamouda, Shai Halevi and Tzipora Halevi.</p> <p><i>Thwarting Unwanted Blockchain Content Insertion.</i> Authors: Roman Matzutt, Martin Henze, Jan Henrik Ziegeldorf, Jens Hiller and Klaus Wehrle.</p>	<p>IoTDI Workshop 1 (SocialSens)</p> <p>Social Sensing: Technical Advances, Challenges, and Risks (Session Chair: Sue Kase) 1:00 PM - 2:00 PM</p> <p><i>Analysis of Driver Behavior in Times of Crisis</i> Authors: Manda Winlaw, Alycia Perkins and Allaa R. Hilal</p> <p><i>Privacy preserving, crowd sourced crime Hawkes processes</i> Authors: George Mohler</p> <p><i>Detecting Label Errors in Crowd-Sourced Smartphone Sensor Data</i> Authors: Xiao Bo, Christian Poellabauer, Megan K. O'Brien, Chaitanya Krishna Mummidisetty and Arun Jayaraman</p> <p><i>Leadership of Data Annotation Teams</i> Authors: Ian McCulloh, James Burck, Josef Behling, Michael Burks and Jonathon Parker</p> <p>Panel #1: Physics of Information Propagation (Moderator: Tarek Abdelzaher) 2:00 PM - 3:00 PM</p> <p>Vadim Kagan, Sentimetrix Ivan Garibay, University of Central Florida George Mohler, Indiana University Purdue University Indianapolis Mark Orr, Virginia Tech</p>	<p>IoTDI Workshop 2 (IoTSec)</p> <p>Session II: Causality, Redaction and Legal frameworks 1:30 PM – 1:50 PM <i>Ioannis Agadakos, Gabriela Ciocarlie, Bogdan Copos, Tancrede Lepoint, Ulf Lindqvist and Michael Locasto. Butterfly Effect: Causality from Chaos in the IoT</i></p> <p>1:50 PM – 2:10 PM <i>Soteris Demetriaou, Nathaniel D. Kaufman, Jonah Baim, Adam J. Goldsher and Carl A. Gunter. Toward an Extensible Framework for Redaction</i></p> <p>2:10 PM – 2:30 PM <i>Sudip Vhaduri and Christian Poellabauer. Implicit Authentication in Wearables Using Multiple Biometrics</i></p> <p>2:30 PM – 2:50 PM <i>Andrew Weyl and George Williamson. A Multinational Legal Examination of Individual Security Risks Related to the Internet of Things</i></p>	
	Coffee Break (Challenger Foyer)						
	3:30 – 5:00pm	<p>IC2E Workshop 1 (Globe-IoT: Networking)</p> <p><i>Time-scheduled Network Evaluation based on Interference</i> Authors: Tim van der Lee, Antonio Liotta and Georgios Exarchakos</p> <p><i>DYNAMO: Distributed leisure Yacht-carried sensor-Network for Atmosphere and Marine data crowdsourcing applications</i> Authors: Raffaele Montella, Sokol Kosta and Ian Foster</p> <p><i>Practical criteria for scheduling CPU-bound jobs in mobile devices at the edge</i> Authors: Matias Hirsch, Cristian Mateos and Alejandro Zunino</p>	<p>IC2E Tutorial 2 (FECBench)</p>	<p>IC2E Workshop 3 (Blockchain: Applications)</p> <p>BlockCIS—A Blockchain-based Cyber Insurance System. Authors: Tancrede Lepoint, Karim Eldefrawy and Gabriela Ciocarlie.</p> <p>A Cloud Data Movement Policy Architecture Based on Smart Contracts and the Ethereum Blockchain Authors: Stephen Kirkman and Richard Newman.</p> <p>Double-Blind Consent-Driven Data Sharing on Blockchain. Authors: Kumar Bhaskaran, Peter Ilfrich, Praveen Jayachandran, Apurva Kumar, Dain Liffman, Fabian Lim, Karthik Nandakumar, Zhengquan Qin, Venkatraman Ramakrishna, Chun Hui Suen, Emie Teo and Christian Vecchiola.</p>	<p>IoTDI Workshop 1 (SocialSens)</p> <p>Social Sensing: Leveraging Digital Social Trace Data (Session Chair: Jana Diesner) 3:30 PM - 4:30 PM</p> <p><i>Effects of Social Media Involvement, Context, and Data-Type on Opinion Formation</i> Authors: Derik Asher, Justine Caylor and Alexis Neigel</p> <p><i>5 Steps to Make Art Museums Tweet Influentially</i> Authors: Marco Furini, Federica Mandreoli, Riccardo Martoglia and Manuela Montangero</p> <p><i>Identification of Landscape Preferences by using Social Media Analysis</i> Authors: Ankit Rai, Barbara Minsker, Jana Diesner, Karrie Karahalios and Yicheng Sun</p> <p><i>Public Health and Social Media: Language Analysis of Vaccine Conversations</i> Authors: Marco Furini and Gabriele Menegoni</p> <p>Panel #2: Internet of Social and Physical Things: Applications and Challenges (Moderator: Jana Diesner) 4:30 PM - 5:30 PM</p> <p>Tancrede Le Point, SRI International Ning Yu, LEIDOS Klara Nahrstedt, University of Illinois at Urbana Champaign Chenyang Lu, Washington University at St. Louis Moises Sudit, University at Buffalo</p>	<p>IoTDI Workshop 2 (IoTSec)</p> <p>3:30 PM – 3:50 PM <i>Giovanni Gracioli, Murray Dunne and Sebastian Fischmeister. A Comparison of Data Streaming Frameworks for Anomaly Detection in Embedded Systems</i></p> <p>3:50 PM – 4:00 PM <i>Safa Boudabous, Stephan Clémenceon, Ons Jelassi and Marionna Caros Roca. A secure IoT architecture for streaming data analysis and anomaly detection</i></p> <p>4:10 PM – 4:30 PM <i>Ebelechukwu Nwafor, Andre Campbell and Gedare Bloom. Anomaly-based Intrusion Detection of IoT Device Sensor Data using Provenance Graphs</i></p> <p>4:30 PM – 4:50 PM <i>Hamed Haddadi, Vassilis Christophides, Renata Cruz Teixeira, Kenjira Cho, Shigeya Suzuki and Adrian Perrig. SIOtOME: An Edge-ISP Collaborative Architecture for IoT Security</i></p> <p>4:50 PM – 5:00 PM <i>Concluding Remarks</i></p>	
	6:00 – 8:00pm						<p>Reception, Posters, Demos (Setup time for posters and demo is from 2pm to 5:30pm)</p>

Date	Time	Room		
		Plaza International Ballroom D Convention Level	Plaza International Ballroom EF Convention Level	Challenger 40-41 Level 3
Wednesday, April 18, 2018	8:30- 9:00am		Joint Opening Remarks	
	9:00 – 10:00am		Keynote: Edge Computing: a New Disruptive Force Speaker: Mahadev Satyanarayanan, Carnegie Mellon University	
	Coffee Break			
	10:30 – 12:00pm	IC2E – Session 1 (Fault Tolerance & Security) Understanding Real-World Timeout Problems in Cloud Server Systems Authors: Ting Dai, Jingzhu He, and Xiaohui Gu (North Carolina State University) and Shan Lu (University of Chicago) Hybrid Adaptive Checkpointing for Virtual Machine Fault Tolerance Authors: Abel Souza (Umeå University), Alessandro Vittorio Papadopoulos (Mälardalen University), Luis Tomás Bolívar and David Gilbert (Red Hat Inc.), and Johan Tordsson (Umeå University) STANlite -- a database engine for secure data processing at rack-scale level Authors: V. A. Sartakov and N. Weichbrodt (TU Braunschweig), S. Krieter (Otto-von-Guericke-University of Magdeburg), T. Leich (Harz University of Applied Sciences) and R. Kapitza (TU Braunschweig) (Short) Scheduling, Isolation, and Cache Allocation: A Side-Channel Defense Authors: Read Sprabery and Konstantin Evchenko (University of Illinois at Urbana-Champaign), Abhilash Raj and Rakesh B. Bobba (Oregon State University), and Sibir Mohan and Roy Campbell (University of Illinois at Urbana-Champaign)	IoTDI – Session 1 (IoT & Applications) Cook over IP: Adapting TCP for Cordless Kitchen Appliances Shruthi Kashyap, Vijay S. Rao, R. Venkatesha Prasad (TU Delft) Toine Staring (Philips Research) An Automatic and Accurate Real-time Localization System for Firefighters Jinyang Li (University of Science and Technology of China), Zhiheng Xie (University of Virginia), Xiaoshan Sun, Jian Tang, Hengchang Liu (University of Science and Technology of China), John Stankovic (University of Virginia) DAMON: A Data Authenticity Monitoring System for Diabetes Management William Young, John Corbett, Matthew Gerber, Stephen Patek, Lu Feng (University of Virginia)	
	Lunch Buffet (Room: Plaza International Ballroom G)			
	1:30 – 3:00pm		Panel Discussion Topic: "Implications of AI on IoT and Cloud Systems" Moderator: Klara Nahrstedt (UIUC) Panelists: <ul style="list-style-type: none">Lotzi Boloni (UCF)Roy Campbell (UIUC)Lucy Cherkasova (HP)Radu Marculescu (CMU)	
Coffee break				
3:30 – 5:00pm	IC2E – Session 2 (Cloud Services & Tools) Automatic Dependency Management for Scientific Applications on Gusters Authors: Benjamin Tovar, Nicholas Hazekamp, Nathaniel Kremer-Herman, and Douglas Thain (University of Notre Dame) Tracking Causal Order in AWS Lambda Applications Authors: Wei-Tsung Lin, Chandra Krintz, Rich Wolski, and Michael Zhang (UC Santa Barbara) and Xiaogang Cai, Tongjun Li, and Weijin Xu (Huawei) M2: Malleable Metal as a Service Authors: Apoorve Mohan (Northeastern University), Ata Turk (Boston University), Ravi S. Gudimela (Red Hat), Sahil Tikale, Jason Hennessey, and Ugur Kaynar (Boston University), Gene Cooperman and Peter Desnoyers (Northeastern University), and Orran Krieger (Boston University) (Short) MAKER as a Service: Moving HPC applications to Jetstream Cloud Authors: Nicholas Hazekamp (University of Notre Dame), Upendra Kumar Devisetty (Cyverse), Nirav Merchant (The University of Arizona), and Douglas Thain (University of Notre Dame)	IoTDI – Session 2 (IoT & Activities) UnTran: Recognizing Unseen Activities with Unlabeled data using Transfer Learning Md Abdullah Al Hafiz Khan, Nirmalya Roy (University of Maryland Baltimore County) Kestrel: Video Analytics for Augmented Multi-Camera Vehicle Tracking Hang Qiu, Xiaochen Liu (University of Southern California), Swati Rallapalli (IBM Research), Archith J. Bency (UCSB), Rahul Urganekar (Amazon), B.S. Manjunath (UCSB), Ramesh Govindan (University of Southern California), Kevin Chan (ARL) MARBLE: Mobile Augmented Reality Using a Distributed BLE Beacon Infrastructure Chong Shao, Bashima Islam, Shahriar Nirjon (University of North Carolina at Chapel Hill)		
9:00-10:00am			Keynote: Data Intelligence and Analytics at Alibaba Speaker: Jingren Zhou, Alibaba Group	
Coffee Break				
10:30 – 12:00pm	IC2E – Session 3 (VMs and Containers) Deterministic Container Resource Management in Derivative Clouds Authors: Chandra Prakash, Prashanth, Umesh Bellur, and Purushottam Kulkarni (Indian Institute of Technology Bombay) Cross-layer Optimization for Virtual Machine Resource Management Authors: Ming Zhao (Arizona State University), Lixi Wang (Amazon.com), Yun Lv (Beihang University), and Jing Xu (Google) (Short) UniGuard: Protecting Unikernels using Intel SGX Authors: Ioannis Sfyrakis and Thomas Groß (Newcastle University) (Short) An Online Virtual Machine Placement Algorithm in an Over-Committed Cloud Authors: Siqi Ji, Ming Da Li, Niannian Ji, and Baochun Li (Electrical and Computer Engineering, University of Toronto)	IoTDI – Session 3 (IoT & Fault Tolerance/Safety) RIDE: A Resilient IoT Data Exchange Middleware Leveraging SDN and Edge Cloud Resources Kyle Benson, Guoxi Wang (University of California, Irvine), Young-Jin Kim (Nokia Bell Labs), Nalini Venkatasubramanian (University of California, Irvine) Brume - A Horizontally Scalable and Fault Tolerant Building Operating System Almir Mehanovic, Thomas Heine Rasmussen, Mikkel Baun Kjærgaard (University of Southern Denmark) Hardware-based Online Self-diagnosis for Faulty Device Identification in Large-scale IoT Systems Junghee Lee, Monobrata Debnath, Amit Patki, Mostafa Hasan (University of Texas at San Antonio), Chrysostomos Nicopoulos (University of Cyprus)		
Lunch Buffet (Room: Plaza International Ballroom G)				
1:30-3:00pm	IC2E – Industry Session 1 (Case Studies) Massive-Scale Deployments in Cloud: the Case of OpenStack Networking Authors: Jesus Llorente Santos and Maël Kimmerlin Geospatial Analytics in the Large for Monitoring Depth of Cover for Buried Pipeline Infrastructure, Authors: Michael Homacek, Daniel Schall, Philipp Glira, Sebastian Geiger, Andreas Egger, Andrei Filip, Claudia Windisch and Mike Liepe	IoTDI – Session 4 (IoT & Security) Sentinel: Secure Mode Profiling and Enforcement for Embedded Systems Paul D. Martin (Harbor Labs), David Russel (Johns Hopkins University), Malek Ben Salem (Accenture), Stephen Checkoway (University of Illinois Chicago), Avi Rubin (Johns Hopkins University) Bark: Securing the Internet of Things with Default-Off Networking James Hong, Amit Levy, Laurynas Riliskis, Philip Levis (Stanford University) Security Vulnerabilities in LoRaWAN Xueying Yang (Delft University of Technology), Evgenios Karampatzakis (Brightsight), Christian Doerr, Fernando Kuipers (Delft University of Technology)		
Coffee Break				
3:30 – 5:00pm	IC2E – Industry Session 2 (Security and Privacy, and Short Papers) Giving Customers Control over Their Data: Integrating a Policy Language into the Cloud, Authors: Jens Hiller, Maël Kimmerlin, Max Plauth, Seppo Heikkilä, Stefan Klauk, Ville Lindfors, Felix Eberhardt, Dariusz Bursztynowski, Jesus Llorente Santos, Oliver Hohlfeld and Klaus Wehrle Scalable Key Management for Distributed Cloud Storage, Authors: Mathias Bjoerkqvist, Christian Cachin, Felix Engelmann and Alessandro Sorniotti (SHORT) Serving deep learning models in a serverless platform, Authors: Vatche Ishakian, Vinod Muthusamy and Aleksander Slominski (SHORT) Architecture for Analysis of Streaming Data, Authors: Sheik Hoque and Andriy Miransky	IoTDI – Session 5 (IoT & Privacy and Safety) LogSafe: Secure and Scalable Data Logger for IoT Devices Hung Nguyen, Radoslav Ivanov, Linh Thi Xuan Phan, Oleg Sokolsky, James Weimer, Insup Lee (University of Pennsylvania) Privacy-Preserving Personal Model Training Sandra Servia-Rodriguez, Liang Wang, Jianxin R. Zhao, Richard Mortier (University of Cambridge), Hamed Haddadi (Imperial College London) Replacement Autoencoder: A Privacy-Preserving Algorithm for Sensory Data Analysis Mohammad Malekzadeh, Richard G. Clegg (Queen Mary University of London), Hamed Haddadi (Imperial College London)		
7:00-9:00pm			Banquet (Room: Plaza International Ballroom G)	
9:00 – 10:00am			Keynote: Time to Retire Linux (and C) in IoT Devices Speaker: Lin Zhong, Rice University	
Coffee Break				
10:30 – 12:00pm	IC2E – Session 4 (Resource Management and Scheduling) OPTIC: Opportunistic Graph Processing in Multi-Tenant Clusters Authors: Muntasar Raihan Rahman (Microsoft), Indranil Gupta (University of Illinois Urbana-Champaign), Akash Kapoor (Princeton University), and Haozhen Ding (Airbnb) Deadline-Aware Scheduling and Routing for Inter-Datcenter Multicast Transfers Authors: Siqi Ji, Shuhao Liu, and Baochun Li (Electrical and Computer Engineering, University of Toronto) (Short) Empya: Saving Energy in the Face of Varying Workloads Authors: Christopher Eibel, Thao-Nguyen Do, Robert Meißner, and Tobias Distler (Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)) (Short) Heterogeneous Resource Reservation Authors: David Breitgand, Ofer Biran, Dean Lorenz, Michael Masin, and Eran Raichstein (IBM Research -- Haifa), Ilyas Iyob (IBM), and Avi Weit (IBM Research -- Haifa)	IoTDI – Session 6 (IoT & Energy) Workload Shaping Energy Optimizations with Predictable Performance for Mobile Sensing Farley Lai, Marjan Radi, Octav Chipara (University of Iowa), William Grisworld (University of California, San Diego) From Energy Audits to Monitoring Megawatt Loads: A Flexible and Deployable Power Metering System Bradford Campbell (University of Virginia), Ye-sheng Kuo (Samsara), Prabal Dutta (University of California at Berkeley) SEHS: Simultaneous Energy Harvesting and Sensing using Piezoelectric Energy Harvester Dong Ma, Guohao Lan, Weitao Xu, Mahbub Hassan, Wen Hu (University of New South Wales)		
Lunch Break				
1:30 – 3:00pm	IC2E – Session 5 (Performance Evaluation and Modeling) Towards an Adaptive, Fully Automated Performance Modeling Methodology for Cloud Applications Authors: Ioannis Giannakopoulos (National Technical University of Athens), Dimitrios Tsoumakos (Ionian University), and Nectarios Koziris (National Technical University of Athens) Serverless Computing: An Investigation of Factors Influencing Microservice Performance Authors: Wes Lloyd (University of Washington, Tacoma), Shruti Ramesh (Microsoft), Swetha Chinthalapati and Lan Ly (University of Washington, Tacoma), and Shrideep Pallickara (Colorado State University) (Short) An Experimental Analysis of PaaS Users Parameters on Applications Energy Consumption Authors: David Guyon (University of Rennes 1), Anne-Cécile Orgerie (CNRS, IRISA), and Christine Morin (Inria) (Short) A Precise Model for Google Cloud Platform Authors: Stéphanie Challita, Faiez Zalila, Christophe Gourdin, and Philippe Merle (Inria Lille – Nord Europe)	IoTDI – Session 7 (IoT & Transportation) Online Load Control and Balancing for Electric Vehicle Charging Fanxin Kong (University of Pennsylvania), Xue Liu (McGill University), Insup Lee (University of Pennsylvania) Planning Electric Vehicle Charging Stations based on User Charging Behavior Jinyang Li, Xiaoshan Sun, Qi Liu (University of Science and Technology of China), Wei Zheng (Comprehend (Suzhou) Information Technology Inc.), Hengchang Liu (University of Science and Technology of China), John Stankovic (University of Virginia) PAWS: A Wearable Acoustic System for Pedestrian Safety Daniel de Godoy (Columbia University), Bashima Islam (University of North Carolina at Chapel Hill), Stephen Xia (Columbia University), Md Tamzeed Islam (University of North Carolina at Chapel Hill), Rishkanth Chandrasekaran (Columbia University), Yen-Chun Chen, Shahriar Nirjon (University of North Carolina at Chapel Hill), Peter Kinget, Xiaofan Jiang (Columbia University)	IC2E Doctoral Symposium Session 1 A Data Movement Policy Framework for Improving Trust in the Cloud Using Smart Contracts and Blockchains Authors: Stephen S Kirkman (University of Florida) Monitoring Path Discovery for Supporting Indirect Monitoring of Cloud Services Authors: Heng Zhang, Salman Manzoor, and Neeraj Suri (Technische Universität Darmstadt, Germany)	
Coffee Break				
3:30 – 5:00pm	IC2E – Session 6 (Edge Computing and Storage) (Short) Cloud-based or On-device: An Empirical Study of Mobile Deep Inference Authors: Tian Guo (Worcester Polytechnic Institute) (Short) EMMA: Distributed QoS-Aware MQTT Middleware for Edge Computing Applications Authors: Thomas Rausch, Stefan Nastic, and Schahram Dustdar (TU Wien) (Short) A Sample Average Approximation-Based Parallel Algorithm for Application Placement in Edge Computing Systems Authors: Hossein Badri, Tayebeh Bahreini, Daniel Grosu, and Kai Yang (Wayne State University) (Short) Feasibility Study of Location-Conscious Multi-Site Erasure-Coded Ceph Storage for Disaster Recovery Authors: Keitaro Uehara (Hitachi Ltd., Research & Development Group) and Yi-Fan Robin Chen, Matti Hiltunen, Kaustubh Joshi, and Richard Schlichting (AT&T Labs-Research) (Short) Toward Transparent Data Management in Multi-Layer Storage Hierarchy of HPC Systems Authors: Bharti Wadhwa (Virginia Tech), Suren Byan (Lawrence Berkeley National Laboratory), and Ali R. Butt (Virginia Tech) (Short) Analyzing Privacy Policies of Zero Knowledge Cloud Storage Applications on Mobile Devices Authors: Rawan Balous, Ronald Poet, and Timothy Storer (University of Glasgow)	IoTDI – Session 8 (Short Papers) Tethys: Collecting Sensor Data without Infrastructure, Trust, or Maintenance Holly Chiang, James Hong, Kevin Kinningham, Laurynas Riliskis, Philip Levis, Mark Horowitz (Stanford University) Integrating Low-Power Wide-Area Networks in White Spaces Mahbubur Rahman, Abusayeed Saifullah (Wayne State University) Real-Time Wireless Routing for Industrial Internet of Things Chengjie Wu, Dolvara Gunatilaka (Washington University in St. Louis), Mo Sha (SUNY Binghamton), Chenyang Lu (Washington University in St. Louis) Cyber-Physical Scheduling for Predictable Reliability of Inter-Vehicle Communications Chuan Li (Wayne State University), Hongwei Zhang (Iowa State University), Jayanthi Rao (Ford Research), Le Yi Wang, George Yin (Wayne State University)	IC2E Doctoral Symposium Session 2 Threat Modeling and Analysis for the Cloud Ecosystem Authors: Salman Manzoor, Heng Zhang, and Neeraj Suri (Technische Universität Darmstadt, Germany) Tuning Performance of Spark Programs Authors: Hong Zhang, Zixia Liu, and Liqiang Wang (University of Central Florida)	
5:00 – 5:15pm		IC2E – Closing Remarks	IoTDI – Closing Remarks	