

**October 11, 2016**

**Registrations – October 11, 08:00 – 09:00**

**Opening session – October 11, 08:30 – 09:00**

**Keynote 1– October 11, 09:00 – 10:30**

Towards a Shared Ledger Business Collaboration Language based on Data-Aware Processes  
Richard Hull, IBM Research, Yorktown Heights, NY, USA

**Service Analytics I (3 Full papers) – October 11, 11:00 – 12:30**

- Automated Quality Assessment of Unstructured Resolution Text in IT Service Systems  
Agarwal, Shivali; Sridhara, Giriprasad; Dasgupta, Gaargi B
- A Skewness-based Framework for Mobile App Permission Recommendation and Risk Evaluation.  
Huang, Keman; Han, Jinjing; Chen, Shizhan; Feng, Zhiyong
- On Engineering Analytics for Elastic IoT Cloud Platforms.  
Truong, Hong-Linh; Copil, Georgiana; Dustdar, Schahram; Le, Duc-Hung; Moldovan, Daniel; Nastic, Stefan

**Service/Process Foundation (2 Full + 2 short papers) – October 11, 11:00 – 12:30**

- Deriving Consistent GSM Schemas from DCR Graphs  
Eshuis, Rik; Debois, Soren; Slaats, Tijs; Hildebrandt, Thomas
- A Formal Guidance Approach for Correct Process Configuration  
Boubaker, Souha; Mammam, Amel; Graiet, Mohamed; Gaaloul, Walid
- Integrating POMDP and SARSA for Service Composition with Incomplete Information (SHORT)  
Wang, Hongbing; Zhang, Xingzhi; Yu, Qi
- Formal Specification and Verification Framework for Multi-domain Ubiquitous Environment (SHORT)  
Hilia, Mohamed; Chibani, Abdelghani; Djouani, Karim; Amirat, Yacine

**Service Recommendation I (3 Full papers) – October 11, 13:30 – 15:00**

- Meta-Path based Service Recommendation in Heterogeneous Information Networks  
Liang, Tingting; Chen, Liang; Wu, Jian; Dong, Hai; Bouguettaya, Athman
- A Robust Approach to Finding Trustworthy Influencers in Social E-Commerce Environments  
Liu, Guanfeng; Wang, Yan; Orgun, Mehmet A.
- Context-Aware Recommendation of Task Allocations in Service Systems  
Sindhgatta, Renuka; Ghose, Aditya

**Service Analytics (Industry) (3 Full papers) – October 11, 13:30 – 15:00**

- A Data Services-Based Quality Analysis System for the Life Cycle of Tire Production  
Shi, Yuliang; Chen, Yu; Sun, Shibin; Liu, Lei; Cui, Lizhen
- Towards More Effective Solution Retrieval in IT Support Services Using Systems Log  
Zhu, Rongda; Deng, Yu; Sarkar, Soumitra; Maghraoui, Kaoutar El; Ramasamy, Harigovind V; Bivens, Alan
- Top-Down Pricing of IT Services Deals with Recommendation for Missing Values of Historical and Market Data  
Megahed, Aly; Gajananan, Kugamoorthy; Asthana, Shubhi; Becker, Valeria; Smith, Mark; Nakamura, Taiga

**Service Recommendation II (1 Full + 2 short papers) – October 11, 15:00 – 16:00**

- Semantic Pattern Mining Based Web Service Recommendation  
Naim, Hafida; Aznag, Mustapha; Durand, Nicolas; Quafafou, Mohamed
- Service Recommendation based on Social Balance Theory and Collaborative Filtering (SHORT)  
Qi, Lianyong
- Personalized API Recommendation via Implicit Preference Modeling (SHORT)  
Gao, Wei; Chen, Liang; Wu, Jian; Dong, Hai; Bouguettaya, Athman

**Service in Organization (Industry) (2 Full papers) – October 11, 15:00 – 16:00**

- A Discrete Constraint-based Method for Pipeline Build-up Aware Services Sales Forecasting  
Yin, Peifeng; Megahed, Aly; Nezhad, Hamid; Nakamura, Taiga
- Clustering and Labeling IT Maintenance Tickets  
Roy, Suman; Muni, Durga Prasad; Yeung Tack Yan, John-John; Budhiraja, Navin; Ceiler, Fabien

**Service Analytics II (2 Full + 2 short papers) – October 11, 16:30 – 18:00**

- Time-Aware Customer Preference Sensing and Satisfaction Prediction in a Dynamic Service Market  
Wang, Haifang; Wang, Zhongjie; Xu, Xiaofei
- Prediction of Web Services Evolution  
Wang, Hanzhang; Kessentini, Marouane; Ouni, Ali
- A Testing Approach for Hidden Concurrencies based on Process Execution Logs (SHORT)  
Böhmer, Kristof; Rinderle-Ma, Stefanie
- autoCEP: Automatic Learning of Predictive Rules for Complex Event Processing (SHORT)  
Mousheimish, Raef; Taher, Yehia; Zeitouni, Karine

**Cloud and Internet of Services/Things I (2 Full + 2 short papers) – October 11, 16:30 – 18:00**

- FitScale: Scalability of Legacy Applications through Migration to Cloud  
Hwang, Jinho; Vukovic, Maja; Anerousis, Nikos
- Monitoring-based Task Scheduling in Large-Scale SaaS Cloud  
Zhang, Puheng; Lin, Chuang; Ma, Xiao; Ren, Fengyuan
- WiCare: A Synthesized Healthcare Service System Based on WiFi Signals (SHORT)  
Li, Hong; Yang, Wei; Xu, Yang; Wang, Jianxin; Huang, Liusheng
- Service Mining for Internet of Things (SHORT)  
Huang, Bing; Bouguettaya, Athman; Dong, Hai; Chen, Liang

**October 12, 2016**

**Registrations – October 12, 08:00 – 09:00**

**Keynote 2– October 12, 09:00 – 10:30**

Revisiting Service-oriented Architecture for the IoT: A Middleware Perspective

Valerie Issarny, Inria, France

**Panel – October 12, 11:00 – 12:30**

Is Services Computing Essential for IOT and Cyber-physical Systems?

**Social Services (2 Full + 2 short papers) – October 12, 13:30 – 15:00**

- iSim: An Efficient Integrated Similarity based Collaborative Filtering Approach for Trust Prediction in Service-Oriented Social Networks  
Liao, Mingding; Liu, Xiao; Gao, Xiaofeng; Zhong, Jiaofei; Chen, Guihai
- Expertise and Trust-aware Social Web Service Recommendation  
Kalaï, Ahlem; Zayani, Corinne Amel; Amous, Ikram; Sèdes, Florence
- Studying Social Collaboration Features and Patterns in Service Crowdsourcing (SHORT)  
Yu, Hao; Wang, Zhongjie; Chi, Xu; Xu, Xiaofei
- Follow the Leader: A Social Network Approach for Service Communities (SHORT)  
Labbaci, Hamza; Medjahed, Brahim; Aklouf, Youcef; Malik, Zaki

**Demo - Flash talk session – October 12, 13:30 – 15:00**

- Demand-Driven SOA Simulation Platform Based on GIPSY for Context-Based Brokerage  
Laleh, Touraj; Mokhov, Serguei; Paquet, Joey
- DeMOCAS: Domain Objects for Service-based Collective Adaptive Systems  
Bucchiarone, Antonio; De Sanctis, Martina; Marconi, Annapaola; Martinelli, Alberto
- Anuvaad Pranaali: A RESTful API for Machine Translation  
Wani, Nehal J; Suresh Purini; and Dipti Misra Sharma
- Integration of Heterogeneous Services and Things into Choreographies  
Bouloukakakis, Georgios; Georgantas, Nikolaos; Dutta, Siddhartha; Issarny, Valerie
- BPaaS: A Platform for Artifact-centric Business Process Customization in Cloud Computing  
Gao, Min; Yin, Yuyu; Chen, Zaidie; Yan, Zhimin; Guo, Lipeng; Li, Binbin
- Testing Processes with Service Invocation: Advanced Logging in CPEE  
Stertz, Florian; Rinderle-Ma, Stefanie; Hildebrandt, Tobias; Mangler, Juergen
- COOL: A Model-Driven and Automated System for Guided and Verifiable Cloud Solution Design  
Motahari-Nezhad, Hamid Reza; Yorov, Karen; Yin, Peifeng; Nakamura, Taiga; Trent, Scott; Shurek, Gil; Kushida, Takayuki; Subramanian, Uma
- A Service-Based System for Sentiment Analysis and Visualization of Twitter Data in Realtime  
Taher, Yehia; Haque, Rafiqul; Al-Shaer, Mohammad; van den Heuvel, Willem-Jan; Zeitouni, Karine; Araujo, Renata; Said, Mohand-Said; Dbouk, Mohamed
- XDAI-A: Framework for Enabling Cross-Device Integration of Android Apps  
Wolters, Dennis; Kirchhoff, Jonas; Gerth, Christian; Engels, Gregor
- Desire: Deep Semantic Understanding and Retrieval for Technical Support Services  
Gupta, Abhirut; Akula, Arjun; Dasgupta, Gargi; Aggarwal, Pooja; Mohapatra, Prateeti
- BlueSight: Automated Discovery Service for Cloud Migration of Enterprises  
Wu, Dannver; Hwang, Jinho; Vukovic, Maja; Anerousis, Nikos
- A Configurator Component for End-User Defined Mobile Data Collection Processes

Schobel, Johannes; Pryss, Rüdiger; Schickler, Marc; Reichert, Manfred

**Cloud and Internet of Services/Things II (4 Full papers) – October 12, 15:30 – 17:30**

- Cross-Device Integration of Android Apps  
Wolters, Dennis; Kirchoff, Jonas; Gerth, Christian; Engels, Gregor
- Are REST Cloud Computing APIs Well-Designed? An Exploratory Study  
Petrillo, Fabio; Merle, Philippe; Moha, Naouel; Gueheneuc, Yann-Gael
- A Model-Driven Framework for Interoperable Cloud Resources Management  
Weerasiri, Denis; Barukh, Moshe Chai; Benatallah, Boualem; Jian, Cao
- Detecting Cloud (Anti)Patterns: OCCI perspective  
Brabra, Hayet; Mtibaa, Achraf; Sliman, Layth; Gaaloul, Walid; Benatallah, Boualem; Gargouri, Faiez

**Demos – October 12, 15:30 – 17:30**

**October 13, 2016**

**Registrations – October 13, 08:00 – 09:00**

**Keynote 3– October 13, 09:00 – 10:30**

Security and Privacy in the IoT

Elisa Bertino, Purdue University, USA

**Business Process Management (3 Full papers) – October 13, 11:00 – 12:30**

- Optimizing process model redesign  
Kumar, Akhil; Indradat, Paronkasom
- QoS-Driven Management of Business Process Variants in Cloud Based Execution Environments  
Ghosh, Rahul; Ghose, Aditya; Hegde, Aditya; Mukherjee, Tridib; Mos, Adrian
- Propagation of Event Content Modification in Business Processes  
Wondoh, John; Grossmann, Georg; Stumptner, Markus

**Service Economy (2 Full papers + 2 short papers) – October 13, 11:00 – 12:30**

- Features of IT Service Markets: A Systematic Literature Review  
Jazayeri, Bahar; Platenius, Marie Christin; Engels, Gregor; Kundisch, Dennis
- Qualitative Economic Model based Long-term IaaS Composition  
Mistry, Sajib; Bouguettaya, Athman; Dong, Hai; Erradi, Abdelkarim
- An Optimal and Iterative Pricing Model for Multiclass IaaS Cloud Service (SHORT)  
Zhang, Shuo; Pan, Li; Yuan, Dong; Liu, Shijun; Wu, Lei
- A Study of the Energy Consumption of Databases and Cloud Patterns (SHORT)  
Bani, Béchir; Khomh, Foutse; Guéhéneuc, Yann-Gaël

**Business Process Modeling (2 Full papers + 2 short papers) – October 13, 13:30 – 15:00**

- Discovery of Multi-Perspective Declarative Process Models  
Schoenig, Stefan; Di Ciccio, Claudio; Maggi, Fabrizio Maria; Mendling, Jan
- Declarative Process Models: Different Ways to be Hierarchical  
De Masellis, Riccardo; Di Francescomarino, Chiara; Ghidini, Chiara; Maggi, Fabrizio Maria
- A Novel Heuristic Method for Improving the Fitness of Mined Business Process Models  
Sun, Yaguang; Bauer, Bernhard
- REST-enabled Decision Making in Business Process Choreographies  
Nikaj, Adriatik; Batoulis, Kimon; Weske, Mathias

**Service Management (2 Full papers + 2 short papers) – October 13, 13:30 – 15:00**

- An Uncertain Assessment Compatible Incentive Mechanism for Eliciting Continual and Truthful Assessments of Cloud Services  
Qu, Lie; Wang, Yan; Orgun, Mehmet
- Bi-Level Identification of Web Service Defects  
Wang, Hanzhang; Kessentini, Marouane; Ouni, Ali
- Data-dependent QoS-based Service Selection (SHORT)  
Jain, Navati; Ding, Chen; Liu, Xumin
- A Mobile Service Engine Enabling Complex Data Collection Applications (SHORT)  
Schobel, Johannes; Pryss, Rüdiger; Wipp, Wolfgang; Schickler, Marc; Reichert, Manfred

**Service Design (Industry) (3 Full papers) – October 13, 15:30 – 17:00**

- Context as a Service: Realizing Internet of Things-Aware Processes for the Independent Living of the Elderly  
Yao, Lina; Benatallah, Boualem; Wang, Xianzhi; Tran, Nguyen Khoi; Lu, Qinghua
- Enriching API Descriptions by adding API Profiles through Semantic Annotation  
Lucky, Meherun Nesa; Cremaschi, Marco; Lodigiani, Barbara; Menolascina, Antonio; De Paoli, Flavio
- Service-oriented autonomic pervasive context  
Aygaliñc, Colin; Gerbert-Gaillard, Eva; Vega, German; Lalanda, Philippe

**Service UIs, APIs and Mashup (2 Full + 2 short papers) – October 13, 15:30 – 17:00**

- JSON Patch for turning a pull REST API into a push one  
Cao, Hanyang; Falleri, Jean-Rémy; Blanc, Xavier; Zhang, Li
- User Interface Derivation based on Role-enriched Business Process Model  
Han, Lei; Zhao, Weiliang; Yang, Jian
- Empirical Study on the Interface and Feature Evolutions of Mobile Apps (SHORT)  
Hao, Youqiang; Wang, Zhongjie; Xu, Xiaofei
- Service Package Recommendation for Mashup Development based on a Multi-level Relational Network (SHORT)  
Cao, Jian