

Introduction to the Minitrack on Service Analytics

Hansjoerg Fromm, Gerhard Satzger
Karlsruhe Institute of Technology (KIT)
Karlsruhe Service Research Institute (KSRI)
hansjoerg.fromm@kit.edu
gerhard.satzger@kit.edu

Thomas Setzer
Karlsruhe Institute of Technology (KIT)
Corporate Services and Systems Group (CSSI)
thomas.setzer@kit.edu

The Minitrack on Service Analytics is part of the Decision Analytics, Mobile Services and Service Science Track of the 50th Annual Hawaii International Conference on System Sciences (HICSS-50) on January 4-7, 2017.

Service Analytics describe all processes of capturing, processing, and analyzing data taken from a service system – in order to improve, extend, and personalize the service provided and to create new value for both the provider and the customer.

The modern view on services focuses on the co-creation of value between providers and customers—leveraging knowledge, skills, and resources of both partners from an overall system point of view. In most service systems, however, the service providers have no access to data related to the service usage by their customers. On the other hand, an increasing volume of data will be collected either by the users/customers themselves (e.g. through mobile/smart phones) or by technologies like smart metering in energy services, telematics in automotive and mobility services, RFID in logistics, condition sensors usage in engineering, or data capture solutions in healthcare.

Research topics addressed in this year's minitrack and in future installations of the minitrack include the applicability of basic and advanced analytics to different service systems, the state-of-the-art of service analytics methodologies and tool-support, and the investigation of benefits resulting from the application of service analytics.

This minitrack will serve as a forum for researchers and practitioners to share progress in the study of these and related themes. Submissions on, but not limited to, the following topics are encouraged:

- Web Usage Mining and Web Personalization
- Data Mining / Machine Learning applied to Services
- Recommender Systems for Services

- Social Network Analytics applied to Services
- Privacy Issues resulting from Service Analytics
- Fraud Analytics for Service Systems
- Analysis and Prediction of User Behavior in Mobile Phone Systems
- Analysis and Prediction of Driver Behavior in Traffic Situations
- Analysis and Exploitation of Floating Car Data
- Electricity Consumption Analysis using Smart Meter Data
- Analytics for Healthcare Services
- Analysis and Prediction of IT Service Demand Patterns
- Analysis of Service Problem Reports
- Industrial Service Analytics and Optimization
- Sports Analytics

The following research papers have been accepted for publication in the HICSS proceedings and will be presented at this year's Service Analytics Minitrack:

·*Parameter Tolerance in Capacity Planning Models*, by Ying Tat Leung, Manjunath Kamath, and Juan Ma

·*GreedyBoost: An Accurate, Efficient and Flexible Ensemble Method for B2B Recommendations*, by Weipeng Zhang, Tobias Enders, and Dongsheng Li

·*Feature Selection for Electric Vehicle Service Analytics*, by Jennifer Schoch, Philipp Staudt, and Thomas Setzer

·*Road Condition Estimation Based on Heterogeneous Extended Floating Car Data*, by Kevin Laubis, Viliam Simko, Alexander Schuller, and Christof Weinhardt

·*Generating Rental Data for Car Sharing Relocation Simulations on the Example of Station-Based One-Way Car Sharing*, by Alfred Benedikt Brendel, Christian Rockenkamm, and Lutz Maria Kolbe