

Workshop title:

Situation recognition by mining temporal information (SIREMTI 2017)

Organizers:

Dr. Olga Streibel
independent research engineer &
postdoctoral fellow at
Freie Universität Berlin
Institute for Computer Science
AG Corporate Semantic Web

Olga Streibel is a passionate computer scientist and research engineer, currently living in Berlin. Recently, she worked as a postdoc at the National Institute of Informatics in Tokyo, Japan. Previously, she worked as a full time researcher at Freie Universität Berlin, Germany. She holds the PhD degree in computer science from Freie Universität Berlin and Dipl.-Inform.(Diploma in computer science, equivalent to M.Sc.) degree from Technische Universität Berlin.

Having broad research experience in the area of applied A.I. including approaches from Semantic Web and Information Retrieval, Text/Data Mining and Machine Learning, she recently focused on Trend Mining in textual data and situation recognition based on WiFi data. Her research interests lie in general in applied A.I. and methods of temporal analysis of different kind of data. Among other events, she organized workshop on Mining Future Internet at the Future Internet Symposium 2010, co-organized as a local chair the MobiCASE2015 and organized the SIREMTI2015 workshop.

Prof. Dr. Adrian Paschke
Full professor of Corporate Semantic Web group and head of Data Analytics (DANA) group
Freie Universität Berlin
Institute for Computer Science
AG Corporate Semantic Web,
Fraunhofer Institute FOKUS
Berlin

Since 2008 Prof. Dr. rer. nat. Adrian Paschke is head of the Corporate Semantic Web group (AG-CSW) at the institute of computer science, department of mathematics and computer science at Freie Universität Berlin (FUB). He also is director of the Data Analytics Lab (DANA) at Fraunhofer FOKUS, director of RuleML Inc. in Canada, and professorial member at the Institut für Angewandte Informatik (InfAI) at University of Leipzig. He also was associate professor at the department of information systems at the Poznan University of Economics (PUE). His research focuses on: 1. Declarative Knowledge Representation and Web Reasoning, Semantic Technologies (Ontologies, Rules, Linked Data), Logic-based Reasoning and Computational Logics on the Web, 2. Big Data and Analytics, Semantic Complex Event Processing and Streaming Analytics, Distributed Event Based Systems, and real-time / temporal Data/Information/Knowledge Processing and distributed Web Reasoning

Prof. Danilo Montesi, PhD
Professor of Database and Information Systems and founder of SmartData research group
University Bologna
Department of Computer Science and Engineering
Database and Information Systems
Bologna

Since November 2005 Prof. Danilo Montesi has been full professor of Database and Information Systems at the University of Bologna. His principal interests are in the area of data and information management. Since 2001 he has also been associated with Bologna Business School, where he has taught in several (executive) master programs. He was vice chair of the department of computer science from 2006 until 2009 and was teaching director of undergraduate and postgraduate programs in the department, from 2009 until 2012. He is the founder of SmartData Research Group.

Summary of workshop content and format.

Short description

How can we harvest the temporal information from our environment, including the web, and create solutions to different situation recognition problems, i.e. small and big emergency or disaster situations of any kind? Relying on the omnipresent information and data available - are we able to create intelligent and assistive approaches that could support us in our everyday life?

Based on the huge amount of available web data and data from web-connected devices, we should be able to derive relevant information to our advantage and most probably foreseen any epidemic or disaster situation. There are different methods and algorithms that enable the processing and mining of temporal information from the available temporal data. This workshop focuses on these methods and aims at merging research works relevant to mining temporal information from any kind of data with a special focus on following methods:

- trend mining
- trend detection
- topic mining and mining of users posts
- intelligent situation recognition
- data stream processing
- data mining on streaming data
- temporal data mining
- geo-data mining
- spatio-temporal information retrieval
- data-based situation recognition
- wireless data mining
- signal detection and analysis
- complex event processing
- semantic complex event processing
- ontology-based methods for situation recognition
- rule-based methods for analysis of data streams

We are interested in bringing together researchers focusing on harvesting temporal information from different data, including web data of different kind, spatio-temporal data, geo-data and mobile data, sensor data from any environmental sensors, data from ambient RF signals with the goal of situation recognition. Also, we welcome research works describing relevant use cases or reporting on any applied solutions to the problems of situation recognition with the goal of assistance to the users and respect to users' privacy.

Expected participants:

Researchers from computer science and engineering from academia and industry are welcome.

Keynote:

We are planning for a keynote and or invited talk to motivate lively discussions.

Workshop format:

Workshop is planned as a full day event with short and long presentations, with morning and afternoon session. Maximum participants: 20. It is the second workshop edition and the main goal is bring together researchers interested in workshop topics and build up a relevant community by identifying relevant research problems and bringing up relevant discussions. We plan for CfP with short and long paper submission, also demo submissions will be welcome. Every submission will go through double-blind review. Proceedings will be published with CEUR and if relevant, discussions outcome will be published as a blog.

Previous workshop information:

The first edition of this workshop took place in November 2015 co-located at the MobiCASE international conference on Mobile Computing, Applications and Services. There were 5 presentations and one invited talk: <https://sites.google.com/site/siremitei2015/home>

SIREMTI2016 is currently scheduled for KI2016 <https://sites.google.com/site/siremti/home>

PC members (TBC):

Jean-Paul Calbimonte, PhD (Distributed Information Systems Lab (LSIR), École Polytechnique Fédérale de Lausanne, Switzerland)

Prof. Oscar Corcho, PhD (Departamento de Inteligencia Artificial, Universidad Politécnica de Madrid, Spain)

Dr. Alessandra Mileo (The Insight Centre for Data Analytics, NUI Galway, Ireland)

Prof. Dr. Adrian Paschke (AG Corporate Semantic Web, Freie Universität Berlin, Germany)

Dr. Olga Streibel (National Institute of Informatics, Tokyo, Japan)

Prof. Atsuhiro Takasu (National Institute of Informatics, Tokyo, Japan)

Dr. Kia Teymourian (Rice University Houston, Texas, USA)

Prof. Danilo Montesi (Bologna University, Italy)

Dr. Juan Alegre (National Institute of Informatics)