

SIMPDA 2015

FIFTH INTERNATIONAL SYMPOSIUM ON DATA-DRIVEN PROCESS DISCOVERY AND ANALYSIS 9-11 DECEMBER, 2015 - VIENNA, AUSTRIA <u>simpda2015.di.unimi.it</u>

About SIMPDA

With the increasing automation of business processes, growing amounts of process data become available. This opens new research opportunities for business process data analysis, mining and modelling. The aim of the IFIP 2.6 International Symposium on Data-Driven Process Discovery and Analysis is to offer a forum where researchers from different communities and the industry can share their insight in this hot new field.

The Symposium will feature a number of keynotes illustrating advanced approaches, shorter presentations on recent research, a competitive PhD seminar and selected research and industrial demonstrations. This year the symposium will be held in Vienna, a city in the UNESCO World Heritage List.



Call for Papers

The IFIP International Symposium on Data-Driven Process Discovery and Analysis (SIMPDA 2015) offers a unique opportunity to present new approaches and research results to researchers and practitioners working in business process data modelling, representation and privacy-aware analysis.

The symposium will bring together leading researchers, engineers and scientists from around the world. Full papers must not exceed 15 pages. Short papers are limited to at most 4 pages. All papers must be original contributions, not previously published or under review for publication elsewhere. All contributions must be written in English and must follow the LNCS Springer Verlag format. Templates can be downloaded from: http://www.springer.de/comp/lncs/ authors.html Accepted papers will be published in a pre-proceeding volume of CEUR workshop series. The authors of the accepted papers will be invited to submit extended articles to a post-symposium proceedings volume which will be published in the LNBIP series (Lecture Notes in Business Information Processing, http://www.springer.com/series/7911), scheduled for late 2016 (extended papers length will be between 7000 and 9000 words). Around 10-15 papers will be selected for publication after a second round of review.

Topics

Topics of interest for submission include, but are not limited to:

- Business Process modeling languages, notations and methods
- Lightweight Process Model
- Data-aware and data-centric approaches
- Process Mining with Big Data
- Variability and configuration of process models
- Process simulation and static analyses
- Process data query languages
- Process data mining
- Privacy-aware process data mining
- · Process metadata and semantic reasoning
- Process patterns and standards
- Foundations of business process models
- Resource management in business process execution
- Process tracing and monitoring
- Process change management and evolution
- Business process lifecycle
- Case studies and experience reports
- Social process discovery
- Crowdsourced process definition and discovery

Workshop Format:

In accordance to our historical tradition of proposing SIMPDA as a symposium, we propose an innovative format for this workshop:

- The number of sessions depend on the number of submissions but, considering the previous editions, we envisage to have four sessions, with 4-5 related papers assigned to each session. A special session (with a specific review process) will be dedicated to discuss research plan from PhD students.
- Papers are pre-circulated to the authors that will be expected to read all papers in advance but to avoid exceptional overhead, two are assigned to be prepared with particular care, making ready comments and suggestions.
- The bulk of the time during each session will be dedicated to open conversations about all of the papers in a given session, along with any linkages to the papers and discussions within an earlier session.
- The closing session (30 minutes), will include a panel about open challenges during which every participant will be asked to assemble their thoughts/project ideas/goals/etc... that they got out of the workshop.

Call for PhD Research Plans

The SIMPDA PhD Seminar is a workshop for Ph.D. students from all over the world. The goal of the Seminar is to help students with their thesis and research plans by providing feedback and general advice on how to use their research results.

Students interested in participating in the Seminar should submit an extended abstract describing their research. Submissions can relate to any aspect of Process Data: technical advances, usage and impact studies, policy analyses, social and institutional implications, theoretical contributions, interaction and design advances, innovative applications, and social implications.

Research plans should be at most of 5 page long and should be organised following the following structure:

- 1. Abstract: summarises, in 5 line, the research aims and significance.
- 2. Research Question: defines what will be accomplished by eliciting the relevant the research questions.
- 3. Background: defines the background knowledge providing the 5 most relevant references (papers or books).
- 4. Significance: explains the relevance of the general topic and of the specific contribution.

- 5. Research design and methods: describes and motivates the method adopted focusing on: assumptions, solutions, data sources, validation of results, limitations of the approach.
- 6. Research stage: describes what the student has done so far.

SIMPDA PhD award

A doctoral award will be given by the SIMPDA PhD Jury to the best research plan submitted.

Student Scholarships

An application for a limited number of scholarships aimed at students coming from emerging countries has been submitted to IFIP.

In order to apply, please contact paolo.ceravolo@unimi.it

Keynote Speakers

VISUAL ANALYTICS MEETS PROCESS MINING: CHALLENGES AND OPPORTUNITIES



THERESIA GSCHWANDTNER AND SILVIA MIKSCH

VIENNA UNIVERSITY OF TECHNOLOGY

Event data or traces of activities often exhibit unexpected behaviour and complex relations. Thus, before and during the application of automated analysis methods, such as process mining algorithms, the analyst needs to investigate and understand the data at hand in order to decide which analysis methods might be appropriate. Visual Analytics integrates the outstanding capabilities of humans in terms of visual information exploration with the enormous processing power of computers to form a powerful knowledge discovery environment. The combination of visual data exploration with process mining algorithms makes complex information structures more comprehensible and facilitates new insights.

In this talk, we will illustrate the various concepts of visual process mining, focusing on the challenges, but also the great opportunities for analysing process data with Visual Analytics methods.



CONTEXTUALISATION TECHNIQUES IN PROCESS MINING

SCHAHRAM DUSTDAR VIENNA UNIVERSITY OF TECHNOLOGY, AUSTRIA

Organizers

CHAIRS Stefanie Rinderle-Ma, Universität Wien, Austria

Paolo Ceravolo, Università degli Studi di Milano, Italy

ADVISORY BOARD Ernesto Damiani, Università degli Studi di Milano, Italy

Erich Neuhold, University of Vienna, Austria

Maurice van Keulen, University of Twente, The Netherlands

Philippe Cudré-Mauroux , University of Fribourg, Switzerland

Program Committee

MOHAMED ACHEMLAL, UNIVERSITY OF BORDEAUX, FRANCE MARCO ANISETTI, UNIVERSITÀ DEGLI STUDI DI MILANO, ITALY IRENE VANDERFEESTEN, EINDHOVEN UNIVERSITY OF TECHNOLOGY, THE NETHERLANDS CLAUDIO ARDAGNA, UNIVERSITÀ DEGLI STUDI DI MILANO, ITALY HELEN BALINSKY, HEWLETT-PACKARD LABORATORIES, UK MIRCO BIANCO, METROCONSULT ROBERTO DINI AND PARTNERS, ITALY JOOS BUIJS, EINDHOVEN UNIVERSITY OF TECHNOLOGY, THE NETHERLANDS ANTONIO CAFORIO, UNIVERSITÀ DEL SALENTO, ITALY CAROLINA CHIAO, UNIVERSITY OF ULM, GERMANY TONY CLARK, MIDDLESEX UNIVERSITY, UK BARABARA WEBER, UNIVERSITY OF INNSBRUCK, AUSTRIA PAUL COTOFREI, UNIVERSITY OF NEUCHÂTEL, SWITZERLAND PHILIPPE CUDRE-MAUROUX, UNIVERSITY OF FRIBOURG, SWITZERLAND NORA CUPPENS, ÉCOLE NATIONALE SUPÉRIEURE DES TELECOMMUNICATIONS DE BRE-TAGNE, FRANCE GIANLUCA DEMARTINI, UNIVERSITY OF SHEFFIELD, UK. CLAUDIO DI CICCIO, WU VIENNA, AUSTRIA SCHAHRAM DUSTDAR, VIENNA UNIVERSITY OF TECHNOLOGY, AUSTRIA GREGOR GRAMBOW, UNIVERSITY OF ULM, GERMANY CHRISTIAN GUETL, UNIVERSITY OF GRAZ, AUSTRIA MOHAND-SAID HACID, UNIVERSITY OF LYON, FRANCE VINCENT HILAIRE, UNIVERSITÉ DE TECHNOLOGIE DE BELFORT MONTBÉLIARD, FRANCE WEI-CHIANG HONG, ORIENTAL INSTITUTE OF TECHNOLOGY, CHINA MUSTAFA JARRAR, BIRZEIT UNIVERSITY, PALESTINE MEIKO JENSEN, RUHR-UNIVERSITY BOCHUM, GERMANY MASSIMO MECELLA, SAPIENZA UNIVERSITÀ DI ROMA, ITALY

JAN MENDLING, WU VIENNA, AUSTRIA

KWANGHOON PIO KIM, KYONGGI UNIVERSITY, SOUTH KOREA. BARBARA RUSSO, FREE UNIVERSITY OF BOZEN - BOLZANO, ITALY GIOVANNA SISSA, UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY MAURICE VAN KEULEN, UNIVERSITY OF TWENTE, THE NETHERLANDS MATTHIAS WEIDLICH, IMPERIAL COLLEGE, UK ISABELLA SEEBER, UNIVERSITY OF INNSBRUCK, AUSTRIA ZEESHAN PERVEZ, UNIVERSITY OF THE WEST OF SCOTLAND, UK MARCIN WYLOT, UNIVERSITY OF FRIBOURG, SWITZERLAND JOSE JACOBO ZUBCOFF, UNIVERSIDAD DE ALICANTE, SPAIN WILFRIED GROSSMANN, UNIVERSITY OF VIENNA, AUSTRIA KARIMA BOUDAOUD, ECOLE POLYTECHNIQUE DE NICE SOPHIA ANTIPOLIS, FRANCE

IMPORTANT DATES

Submission of Full Papers:	October 10th 2015
Submission of PhD Research Plans:	October 10th 2015
Notification of Acceptance:	November 7th 2015
Submission of Camera Ready Papers:	November 21th 2015
Post-proceeding submissions:	March 30th 2016

Historical Information on Previous Editions

SIMPDA was proposed in 2011 and 2012 by IFIP WG 2.6 and 2.12/12.4 as the International Symposium on Data-Driven Process Discovery and Analysis.

The symposium had around 30 attendees in 2011 and 20 in 2012. It featured a number of keynotes illustrating new approaches, shorter presentations on recent research, and a competitive PhD seminar, together with selected research and industrial demonstrations. The authors of the accepted papers have been invited to submit extended articles to a post-symposium proceedings volume published in the Springer LNBIP series. Several events and activities arose off these symposia, among the most notables we have two Dagstuhl seminars:

- Dagstuhl Seminar on Semantic Challenges in Sensor Networks, January 24-29, 2010.
- Dagstuhl Seminar on Unleashing Operational Process Mining, November 24-29, 2010.