Charles University in Prague, MFF, Department of Software Engineering Czech Technical University in Prague, FIT, Dept. of Software Engineering VŠB–TU Ostrava, FEECS, Department of Computer Science Czech Society for Cybernetics and Informatics

Proceedings of the Dateso 2015 Workshop

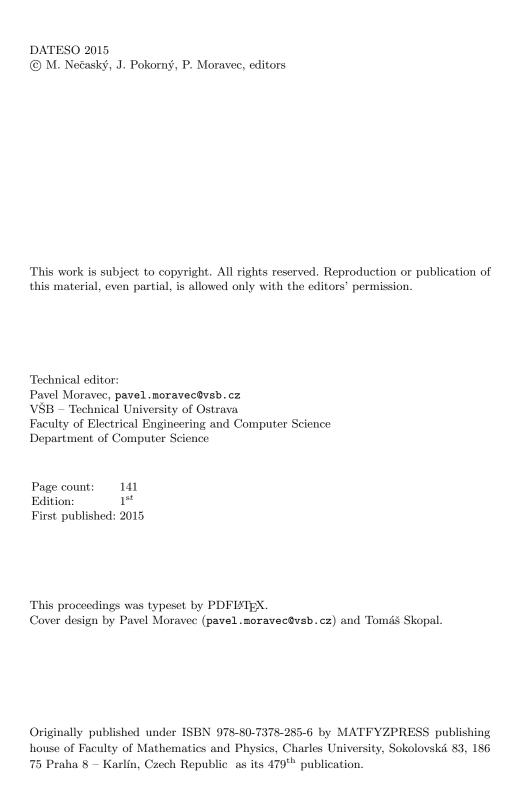


http://www.cs.vsb.cz/dateso/2015/http://www.ceur-ws.org/Vol-1343/





April 14 – 16, 2015 Nepřívěc u Sobotky, Jičín, Czech Republic



Steering Committee

Václav Snášel VŠB-Technical University of Ostrava, Ostrava

Karel Richta Czech Technical University, Prague

Jaroslav Pokorný Charles University, Prague

Program Committee

Martin Nečaský (chair) Charles University, Prague

Wolfgang Benn Technische Universität Chemnitz, Chemnitz, Germany

Václav Snášel VŠB-Technical University of Ostrava, Ostrava

Jaroslav Pokorný Charles University, Prague

Karel Richta Czech Technical University, Prague
Michal Valenta Czech Technical University, Prague
Vojtěch Svátek University of Economics, Prague
Peter Vojtáš Charles University, Prague

Dušan Húsek Inst. of Computer Science, Academy of Sciences, Prague

Michal Krátký VŠB-Technical University of Ostrava, Ostrava Pavel Moravec VŠB-Technical University of Ostrava, Ostrava

Irena Holubová Charles University, Prague

Jiří Dvorský VŠB-Technical University of Ostrava, Ostrava Radim Bača VŠB-Technical University of Ostrava, Ostrava Jan Martinovič VŠB-Technical University of Ostrava, Ostrava

Pavel Strnad Czech Technical University, Prague Ondřej Macek Czech Technical University, Prague Robert Pergl Czech Technical University, Prague Martin Kruiš Czech Technical University, Prague

Organizing Committee

Martin Nečaský (chair) Charles University, Prague Jakub Klímek Charles University, Prague

Pavel Moravec VŠB-Technical University of Ostrava, Ostrava

Preface

DATESO 2015, the international workshop on current trends on Databases, Information Retrieval, Algebraic Specification and Object Oriented Programming, was held on April 14-16, 2015 in Nepřívěc u Sobotky, Jičín, Czech Republic.

The 15th year was organized by Department of Software Engineering MFF UK Praha, Department of Software Engineering, FIT ČVUT Praha, Department of Computer Science VŠB-Technical University Ostrava, and Working group on Computer Science and Society of Czech Society for Cybernetics and Informatics. The DATESO workshops aim for strengthening connections between these various areas of informatics.

The proceedings of DATESO 2015 are also available at DATESO Web site: http://www.cs.vsb.cz/dateso/2015/ and CEUR Workshop Proceeding site: http://www.ceur-ws.org/Vol-1343/ (ISSN 1613-0073). The Program Committee selected 12 papers (8 full and 4 short papers) from 19 submissions, based on two independent reviews.

We wish to express our sincere thanks to all the authors who submitted papers, the members of the Program Committee, who reviewed them on the basis of originality, technical quality, and presentation. We are also thankful to the Organizing Committee. Special thanks belong to Czech Society for Cybernetics and Informatics.

Our thanks go also to Pavel Moravec who, as copy editor of DATESO Proceedings, helped to prepare this volume and provided technical support for the conference preparation portal.

April, 2015

M. Nečaský, J. Pokorný, P. Moravec (Eds.)

Table of Contents

Full Papers

Dynamic Local Scheduling of Multiple DAGs in Distributed Heterogeneous Systems	1
Ondřej Votava, Peter Macejko, Jan Janeček	
Data Structures for Indexing Triple Table	13
Vocabulary for Linked Data Visualization Model	28
Parallel Approach to Context Transformations	40
Methodologies and Best Practices for Open Data Publication	52
Introduction to Optical Music Recognition: Overview and Practical Challenges	65
Critical Evaluation of Existing External Sorting Methods in the Perspective of Modern Hardware	77
Procedural Code Representation in a Flow Graph	89
Short papers	
Biased k-NN Similarity Content Based Prediction of Movie Tweets Popularity	101
UnifiedViews: Towards ETL Tool for Simple yet Powerfull RDF Data Management	111
Aspect-oriented User Interface Design for Android Applications	121
A Survey on Music Retrieval Systems Using Microphone Input Ladislav Maršík, Jaroslav Pokorný, Martin Ilčík	131

Author Index 1	41
----------------	----