Erik Proper
Terry Halpin
John Krogstie (Eds.)

EMMSAD’07
Exploring Modelling Methods for
Systems Analysis and Design

Workshop at

CAiSE’07
The 19th International Conference on
Advanced Information Systems Engineering
EMMSAD’06 Program Committee

Wil van der Aalst, The Netherlands
Antonia Albani, The Netherlands
Pår Ågerfallk, Ireland
Akhilesh Bajaj, USA
Richard Baskerville, USA
Ann Becker, USA
Guiseppe Berio, Italy
Patrick van Bommel, The Netherlands
Nacer Boudjilda, France
Sjaak Brinkkemper, The Netherlands
Cecil Chua Eng Huang, Singapore
Jan Dietz, The Netherlands
John Erickson, USA
Peter Fettke, Germany
Ulrich Frank, Germany
Sari Hakkarainen, Finland
Arthur ter Hofstede, Australia
Andrew Gemino, Canada
Jan Goossenaerts, The Netherlands
Peter Green, Australia
Remigijus Gustas, Sweden
Terry Halpin, USA
Wolfgang Hesse, Germany
Stijn Hoppenbrouwers, The Netherlands
Paul Johannesson, Sweden
Steven Kelly, Finland
Vijay Khatri, USA
John Krogstie, Norway
Peri Loucopoulos, UK
Kalle Lyytinen, USA
Sal March, USA
Graham McLeod, South Africa
Robert Meersman, Belgium
Jan Mendling, Austria
Aldo de Moor, Belgium
Andreas Opdahl, Norway
Hervé Panetto, France
Jeffery Parsons, Canada
Barbara Pernici, Italy
Michaël Petit, Belgium
Erik Proper, The Netherlands
Jolita Ralyté, Switzerland
Sudha Ram, USA
Peter Rittgen, Sweden
John Roddick, Australia
Colette Rolland, France
Michael Rosemann, Australia
Matti Rossi, Finland
Kurt Sandkuhl, Sweden
Peretz Shoval, Israel
Keng Siau, USA
Guttorm Sindre, Norway
Pnina Soffer, Israel
Martin Zehn, Germany
Il-Yeol Song, USA
Eric Yu, Canada
Hans Weigand, The Netherlands
Carson Woo, Canada
EMMSAD’07: Exploring Modelling Methods for Systems Analysis and Design

Preface

Welcome to the 12th International Workshop on Exploring Modelling Methods in Systems Analysis and Design (EMMSAD’07), held in conjunction with CAiSE’07.

The EMMSAD workshop series started in 1996. Over the years, EMMSAD has matured and is now recognized by researchers worldwide as a premier workshop focusing on the exploration and evaluation of modelling methods and methodologies. Similar to previous years, we had many good submissions. After an intensive reviewing process, we accepted 19 out of 33 papers. The submissions came from every corner of the globe. We have received submissions from Australia, Austria, Belgium, Brazil, Canada, India, Ireland, Israel, Italy, France, Finland, Germany, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Tunisia and the USA. The International Program Committee consists of a group of well-known and highly qualified researchers. The success of EMMSAD is largely due to their generous contribution of time and effort.

Continuing our very successful collaboration and cooperation with IFIP WG 8.1, dating back to 1997, this year’s workshop is again a joint activity between CAiSE and IFIP WG 8.1. The Association for Information Systems’ Special Interest Group on Systems Analysis and Design (http://teweiwang.net/sigsand) has been a sponsor of the EMMSAD workshops since 2005.

To assist the authors in finding outlet for their papers, we have been recommending top papers from the workshop to journals. In this vein, the accepted papers of this year’s workshop will be considered for a special issue of World Scientific’s International Journal on Cooperative Information Systems (IJCIS) or as book chapters in Idea Group’s: Advances in Database Research Book Series.

We hope you will enjoy this year’s workshop, while also finding the time to enjoy beautiful as Norway! We look forward to your continuing support for EMMSAD.

Erik Proper, Terry Halpin and John Krogstie
EMMSAD’07 Organizers

Keng Siau, Terry Halpin, John Krogstie
EMMSAD Steering Committee

For more information on the EMMSAD’07 workshop, contact:
Prof.dr. H.A. (Erik) Proper
Email: E.Proper@cs.ru.nl
URL: http://www.emmsad.org
Table of Contents

**Session 1, Quality of models and modelling I**

Towards a Quality-Aware Web Engineering Process .......................... Cristina Cachero, Geert Poels and Coral Calero

Towards a Pragmatic Perspective on Requirements for Conceptual Modeling Methods ........................................ Boris Wysssek and Johannes Maria Zaha

**Session 2, Method engineering**

Towards a Life Cycle for Method Engineering ................................. Naveen Prakash and Shyam Goyal

Representation of Method Fragments: A Domain Engineering Approach .......... Iris Reinhartz-Berger and Anat Aharoni


**Session 3, The process of modeling**

Improving Data Modeling Through the use of Case-Base-Reasoning ............ Paulo Tomé, Ernesto Costa and Luís Amaral

Extending the ORM conceptual schema design procedure with the capturing of the domain ontology ............................................................ Peter Bollen

Integrating Requirement and Solution Modelling: Approach and Experiences ...... Anders Carstensen, Lennart Holmberg, Per Högberg, Svein Johnsen, Dag Karlsen, Frank Lillehagen, Kurt Sandkuhl and Janis Stirna

**Session 4, Experiences with modeling**


Ten Years Plus with EKD: Reflections from Using an Enterprise Modeling Method in Practice .......................................................... Janis Stirna and Anne Persson
Session 5, Quality of models and modelling II
Extending the Discussion of Model Quality: Why Clarity and Completeness may not always be enough ………………………………………………………………………..
Jan Mendling and Jan Recker

QoMo: A Modelling Process Quality Framework based on SEQUAL ……………
Patrick van Bommel, Stijn Hoppenbrouwers and Erik Proper

Session 6, Modelling languages I
Subtyping Revisited …………………………………………………………………
Terry Halpin

Fact Oriented Business Service Modeling …………………………………………..
Peter Bollen

Session 7, Modelling languages II
A UML Profile for Modeling Framework-based Web Information Systems ……..
Vítor Estêvão Silva Souza, Ricardo de Almeida Falbo and Giancarlo Guizzardi.

Automatic Knowledge Retrieval from Conceptual Models ……………………
Jörg Becker and Daniel Pfeiffer

Exploring the Dynamic Costs of Process-aware Information Systems through Simulation ………………………………………………………………………
Bela Mutschler and Manfred Reichert

Session 8, Requirements Modelling
Modelling MAS-Specific Security Features ………………………………………
Ghassan Beydoun, Graham Low, Haralambos Mouratidis and Brian Henderson-Sellers

Defense against Insider Threat: a Framework for Gathering
Goal-based Requirements ………………………………………………………………
Virginia N.L. Franqueira and Pascal van Eck