

## Relations and Kleene Algebra in computer science

Rudolf Berghammer, Ali Mohamed Jaoua, Bernhard Möller

### Angaben zur Veröffentlichung / Publication details:

Berghammer, Rudolf, Ali Mohamed Jaoua, and Bernhard Möller. 2009. "Relations and Kleene Algebra in computer science." *Lecture Notes in Computer Science* 5827: V.  
<https://doi.org/10.1007/978-3-642-04639-1>.

### Nutzungsbedingungen / Terms of use:

licgercopyright

Dieses Dokument wird unter folgenden Bedingungen zur Verfügung gestellt: / This document is made available under these conditions:

**Deutsches Urheberrecht**

Weitere Informationen finden Sie unter: / For more information see:

<https://www.uni-augsburg.de/de/organisation/bibliothek/publizieren-zitieren-archivieren/publiz/>



## Preface

This volume contains the proceedings of the 11th *International Conference on Relational Methods in Computer Science* (RelMiCS 11) and the 6th *International Conference on Applications of Kleene Algebra* (AKA 6). The joint conference took place in Doha, Quatar, from November 1 to November 5, 2009. Its purpose was to bring together researchers from various subdisciplines of Computer Science, Mathematics and related fields who use the calculus of relations and/or Kleene algebra as methodological and conceptual tools in their work.

This conference is the joint continuation of two different strands of meetings. The seminars of the RelMiCS series were held in Schloss Dagstuhl (Germany) in January 1994, Parati (Brasil) in July 1995, Hammamet (Tunisia) in January 1997, Warsaw (Poland) in September 1998, Québec (Canada) in January 2000, and Oisterwijk (The Netherlands) in October 2001. The conference on Applications of Kleene Algebra started as a workshop, also held in Schloss Dagstuhl, in February 2001. To join these two themes in one conference was mainly motivated by the substantial common interests and overlap of the two communities. Over the years this has led to fruitful interactions and opened new and interesting research directions. Joint meetings have been held in Malente (Germany) in May 2003, in St Catherines (Canada) in February 2005, in Manchester (UK) in August/September 2006 and in Frauenwörth (Germany) in April 2008.

This volume contains 24 contributions by researchers from all over the world. Next to 22 regular papers there were the invited talks *Computational Social Choice using Relation Algebra and RELVIEW* by Harrie de Swart (Tilburg University, Netherlands) and *Knowledge and Structure in Social Algorithms* by Rohit Parikh (Brooklyn College and CUNY Grad Center, USA). The papers show that relational and Kleene Algebra methods have wide-ranging diversity and applicability in theory and practice.

In addition, for the third time, a PhD programme was offered. It included the invited tutorials *XX* by Marcelo Frías (University of Buenos Aires, Argentina), *XX* by Ali Jaoua (University of Qatar at Doha) and *Relational Methods at Work* by Gunther Schmidt (University of the Armed Forces at Munich, Germany).

We are very grateful to the members of the Programme Committee and the external referees for their care and diligence in reviewing the submitted papers. We also want to thank Qatar University for having accepted to host the conference and Aws Al-Taie, Fatma Al-Baker, Zeina Hazem Al-Azmeh, Fatma Al-Bloushi and Mohamad Hussein for their assistance; they made organizing this meeting a pleasant experience. We also gratefully appreciate the excellent facilities offered by the EasyChair conference administration system. Finally, we cordially thank our sponsors Supreme Education Council (SEC), Qatar National Research Fund (QNRF) and Qatar University (QU) for their generous support.

November 2009

Rudolf Berghammer  
Ali Jaoua  
Bernhard Möller

## Programme Committee

J Al'Jaam	Doha, Qatar
R. Berghammer	Kiel, Germany
H. de Swart	Tilburg, Netherlands
J. Desharnais	Laval, Canada
R. Duwairi	Doha, Qatar
M. Frías	Buenos Aires, Argentina
H. Furusawa	Kagoshima, Japan
P. Hoefner	Augsburg, Germany
A. Jaoua	Doha, Qatar
P. Jipsen	Chapman, USA
W. Kahl	McMaster, Canada
Y. Kawahara	Kyushu, Japan
L. Meinicke	Sydney, Australia
A. Mili	Tunis, Tunisia; New York, USA
B. Möller	Augsburg, Germany
C. Morgan	Sydney, Australia
E. Orłowska	Warsaw, Poland
S. Saminger-Platz	Linz, Austria
G. Schmidt	Munich, Germany
R. Schmidt	Manchester, UK
G. Struth	Sheffield, UK
M. Winter	Brock, Canada

## External Referees

Bernd Braßel	Koki Nishizawa
Jean-Lou De Carufel	Viorel Preoteasa
Jan Christiansen	Ingrid Rewitzky
Ernst-Erich Doberkat	Pawel Sobocinski
Han-Hing Dang	Kim Solin
Ernst-Erich Doberkat	Sam Staton
Roland Glück	