The 17th Workshop on Domain-Specific Modeling

http://www.dsmforum.org/events/DSM19

SPLASH
20 October 2019
Athens, Greece
Objectives

- Intensive collaborative sessions with group work
- Attempt to discuss, share and solve challenging problems
- See others’ work, DSM languages, tools etc.
- Have something to report to community
- Have fun!
About DSM workshops

- BOF at OOPSLA’00
- First DSVL workshop at OOPSLA’01
- 17th DSM workshop – second time outside North America

- Special issues on Domain-Specific Modeling
  - Software & Systems Modeling, Volume 13, Issue 1, 2014
Some demonstrated languages
What is Domain-Specific Modeling

- Captures domain knowledge (as opposed to code)
  - Uses domain abstractions
  - Applies domain concepts and rules as modeling constructs
  - Narrow down the design space
  - Focus on single range of products

- Lets developers design products using domain terms
  - Apply familiar terminology
  - Solve the RIGHT problems!
  - Solve problems only ONCE!

- Often aims at generation of full production code
About submissions

- 9 submissions
- 21 authors
- Accepted 6 papers
  1 demo
DSM’19 PC

- Ankica Barisic, NOVA-LINCS, Portugal
- Christian Berger, University of Gothenburg, Sweden
- Maicon Bernardino, PUCRS, Brazil
- Erwan Bousse, TU Wien, Austria
- Marco Brambilla, Politecnico di Milano, Italy
- Ruth Breu, University of Innsbruck, Austria
- Javier Luis Canovas Izquierdo, IN3-UOC, Spain
- Verislav Djukic, Djukic Software, Germany
- Steven Kelly, MetaCase, Finland
- Juan de Lara, Universidad Autonoma de Madrid, Spain
- Ileana Ober, University Toulouse 3, France
- Naoyasu Ubayashi, Kyushu University, Japan

Organizing committee:
- Juha-Pekka Tolvanen, MetaCase, Finland
- Jonathan Sprinkle, University of Arizona, USA
- Matti Rossi, Aalto University School of Business, Finland
- Jeff Gray, University of Alabama, USA
Schedule and format

- 09:00 – Overview and introductions
- 09:30 – Keynote: Industry talk
- 10:30 – Break
- 11:00 – Paper presentations: Language engineering
- 12:30 – Lunch
- 14:00 – Paper presentations: Experience reports & demo
- 15:00 – Group work, Topic selection
- 15:30 – Break
- 16:00 – Group work
- 17:00 – Group work reporting
- 17:30 – Closing
Keynote: Industry talk

- A mosaic of models as the driver for Domain-Specific Modeling in the Robotics Industry
  - by Anastasia Mavrommati
    MathWorks
## Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Introduction</td>
</tr>
</tbody>
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| 09:30 | Industry talk: A mosaic of models as the driver for Domain-Specific Modeling in the Robotics Industry  
- Keynote by Anastasia Mavrommati, MathWorks |
| 10:30 | Coffee break                                     |
| 11:00 | Methodology to develop Domain Specific Modeling Languages  
S. Roy Chaudhuri, S. Natarajan, A. Banerjee, V. Choppella |
| 11:20 | A Constraint Modeling Framework for Domain-Specific Languages  
P. Pschorn, P. de Assis, A. Morgenstern, T. Kuhn |
| 11:40 | A Meta-Metamodel for Dynamic Constraint Feedback in Modeling Languages  
M. Bunting, J. Sprinkle |
| 12:00 | ModelFlow: Towards Reactive Model Management Workflows  
B. Sanchez, D. Kolovos, R. Paige |
| 12:30 | Lunch at Restaurant                              |
Program

14:00  Mind the Gap: Lessons Learned from Translating Grammars between MontiCore and Xtext
M. Dalibor, N. Jansen, J. Kästle, B. Rumpe, D. Schmalzing, L. Wachtmeister, A. Wortmann

G. Le Guernic

14:40  Mutation Testing for DSLs: Tool Demo
P. Gómez-Abajo, E. Guerra, J. de Lara, M. Merayo

15:00  Group work topic selection

15:30  Coffee break at Break area

16:00  Group work
All

17:00  Group work reporting

17:30  Closing
Publishing results

- Workshop web-site: www.dsmforum.org/dsm19/
  - Presentation slides
  - Workgroup results
  - Photos
- Twitter: #dsm2019
- Papers: ACM DL