ACM Student Research Competition at MoDELS 2013

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1 Introduction

For the first time MoDELS 2013 hosted the ACM Student Research Competition sponsored by Microsoft Research. The Student Research Competition (SRC) is a forum for undergraduate and graduate students to showcase their research, exchange ideas, and improve their communication skills while competing for prizes. The Student Research Competition has the following goals:

– to give undergraduate and graduate students the opportunity to share their research ideas and results in a special forum that provides visibility for their work;
– to give students the opportunity to meet with and interact with conference attendees to share ideas, gain new insights, and understand possible practical applications;
– to give students an opportunity to sharpen their communication skills, including visual, organizational, oral, and aural modalities;
– to provide detailed feedback to students about their research and presentation, from a panel of distinguished judges from industry and academia to recognize and reward outstanding student research.

The contest has two categories, one for undergraduate research and the other for graduate research[3]. For works accepted to the MoDELS 2013 Student Research Competition, a travel grant of up to US $500 were awarded to help cover travel expenses to the conference. The top three winners at MoDELS 2013 in each category (undergraduate and graduate) received prizes of US $500, US $300, and US $200, respectively. Moreover, all winners received an award plaque and two-year complimentary ACM membership with a subscription to ACMs Digital Library. Winners were recognized during the closing plenary session of the MoDELS 2013 conference.

2 Selection procedure

The winners selection encompassed three steps as summarized in the following.

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[3] For more information about the ACM SRC please refer to `http://src.acm.org/`

Abstract submission To participate in the competition, students submitted a research abstract related to the main themes of the conference and describing the research problem and motivation, background and related work, approach and uniqueness, results, and contributions. Eleven contributions were submitted and a panel of experts (see Section 4) reviewed the submissions and selected seven students to participate in the second round of the competition, which was held in Miami. The abstracts that were selected and included in this document are listed below.

Graduate students category

– *Domain Specific Analysis of Statemachine Models of Reactive Systems*, Karolina Zurowska, Queen's University, Canada
– *Using fUML as Semantics Specification Language in Model Driven Engineering*, Tanja Mayerhofer, Vienna University of Technology, Austria
– *Semantic Specifications for Domain-Specific Modeling Languages*, Gabor Simko, Vanderbilt University, United States
– *Iterative Evaluation of Domain-Specific Languages*, Ankica Barisic, Universidade Nova de Lisboa, Portugal
– *Concern Driven Software Development*, Omar Alam, McGill University, Canada
– *A Framework to Specifying and Analyzing Temporal Properties in UML Class MOdels*, Mustafa Al Lail, Colorado State University, USA

Undergraduate students category

– *Complexity- and Performance Analysis of Different Controller Implementations on a Soft PLC*, Robert Feldmann, Technion, Israel

Poster session It took place in Miami and students had the opportunity to present their research to conference attendees and leading experts in the software engineering fields, including the SRC committee. Judges reviewed the posters and spoke to participants about their research. The judges evaluated the research (quality, novelty, and significance) and the presentation of the research (poster, discussion) and selected students to advance to the next round of the competition.

Presentation session Selected students continued by giving a short presentation of their research in a special session at the MoDELS 2013 conference. After each presentation, a short question and answer session occurred. Evaluations were based on the presenter's knowledge of his/her research area, contribution of the research, and the quality of the oral and visual presentation.

3   Winners

By means of the selection procedure previously summarized the following winners were selected:

Graduate students category

1. *Domain Specific Analysis of Statemachine Models of Reactive Systems*, Karolina Zurowska, Queen's University, Canada

2. *Semantic Specifications for Domain-Specific Modeling Languages*, Gabor Simko, Vanderbilt University, United States
3. *Using fUML as Semantics Specification Language in Model Driven Engineering*, Tanja Mayerhofer, Vienna University of Technology, Austria

Undergraduate students category

1. *Complexity- and Performance Analysis of Different Controller Implementations on a Soft PLC*, Robert Feldmann, Technion, Israel

4 Acknowledgement

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[4] Contributed to the selection of the abstracts only.