

ACM Student Research Competition at MoDELS 2017

Davide Di Ruscio¹, Joel Greenyer²

¹DISIM, University of l'Aquila, Italy

²Leibniz Universität Hannover, Germany

Abstract—MoDELS 2017 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 contest has two categories, one for undergraduate research and the other for graduate research. For works accepted to the MoDELS 2017 Student Research Competition, a travel grant of up to US \$500 were awarded to help cover travel expenses to the conference. Moreover, all winners receive an award plaque and two-year complimentary ACM membership with a subscription to ACMs Digital Library. Winners at MoDELS 2017 were recognized during a conference wide event.

I. INTRODUCTION

The ACM/IEEE 20th International Conference on Model Driven Engineering Languages and Systems (MoDELS) 2017, held on September 17-22, 2017 in Austin (Texas), 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 research¹. For works accepted to the MoDELS 2017 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 in each category (undergraduate and graduate) receive prizes of US \$500, US \$300, and US \$200, respectively. Moreover, all

winners receive an award plaque and two-year complimentary ACM membership with a subscription to ACMs Digital Library. Winners at MoDELS 2017 were recognized during a conference wide event.

II. SELECTION PROCEDURE

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

a) Abstract submission: To participate to 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. Three contributions were submitted and a panel of experts (see Section IV) reviewed the submissions and selected two students to participate in the second round of the competition, which was held in Austin (Texas). The abstracts that were selected and included in this document are listed below.

Graduate students category

- *MaRTS: A Model-Based Regression Test Selection Approach*
Mohammed Al-Refai, Colorado State University (USA)
- *Advanced Techniques and Tools for Secure Collaborative Modeling*
Csaba Debreceni, Budapest University of Technologies and Economics (Hungary)

b) Poster session: It took place in Austin (Texas) 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.

c) Presentation session: Students continued by giving a short presentation of their research in a special session at the MoDELS 2017 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.

¹For more information about the ACM SRC please refer to <http://src.acm.org/>

III. WINNERS

By means of the selection procedure previously summarized the students were ranked as follows:

Graduate students category

- 1) *Advanced Techniques and Tools for Secure Collaborative Modeling*
Csaba Debreceni, Budapest University of Technologies and Economics (Hungary)
- 2) *MaRTS: A Model-Based Regression Test Selection Approach*
Mohammed Al-Refai, Colorado State University (USA)

IV. ACKNOWLEDGEMENT

We would like to thank everyone who made this special event possible. We are obliged to the students that contributed to have a successful event, to the organizing

committee (special thanks go to Don Batory, the MODELS 2017 General Chair), and the following judges that made an excellent job in the different phases of the selection procedure: Arnaud Blouin² (INSA Rennes, France), Michel Chaudron⁴ (Chalmers & Gothenborg University, Sweden), Antonio Cicchetti (Mälardalen University, Sweden), Sebastian Götz (TU Dresden, Germany), Sahar Kokaly (McMaster University, Canada), Dimitrios Kolovos (University of York, UK), Tanja Mayerhofer (Vienna University of Technology, Austria), Alfonso Pierantonio (University of L'Aquila, Italy), Rick Salay⁴ (University of Toronto, Canada), Matthew Stephan (Miami University, USA), Eugene Syriani⁴ (University of Montreal, Canada), Matthias Tichy (University of Ulm, Germany), Antonio Vallecillo⁴ (University of Málaga, Spain), Manuel Wimmer (Vienna University of Technology, Austria)

²Contributed to the selection of the abstracts only.