

InnoCSE 2017

Preface

This volume contains the papers presented at InnoCSE 2017: 1st Workshop on Innovative Approaches in Computer Science within Higher Education (<http://innocse.org/>) held on May 26, 2017 in Chelyabinsk, Russia.

InnoCSE is jointly organized by the Ural Federal University and the South Ural State University. The aim of the workshop is to develop new effective approaches to teaching computer science and software engineering. The workshop is conducted as a part of the international school “Math and Computing Foundations of Software Engineering” within the Erasmus+ PWs@PhD project.

The workshop topics cover various aspects of software engineering education: Advanced Software Engineering Methods and Tools, HCI/Human Aspects in Software Engineering, Management, Business, and Economic Concerns of Software Engineering, Model and Modeling in Software Engineering, and Math and Computing Foundation of Software Engineering.

We have received 18 submissions, each of which has been reviewed by at least three program committee members. The committee decided to accept 8 papers; only 7 of those papers have been included into the present proceedings volume.

Last but not least, we are grateful to our program and organizing committees, who made the workshop possible.

November, 2017
Chelyabinsk, Russia

Andrey Sozykin
Dmitry Ustalov

Table of Contents

Soft Skills of Developers in Software Engineering: View from the PhD Students' Side	1
<i>Sergei Voitenko and Lyudmila Gadasina</i>	
Training of PhDs in Software Engineering in Russia: A Proposal for New Specialty	20
<i>Vladimir Khalin, Voitenko Sergei, Alexander Yurkov and Yury Kosov</i>	
Teaching the Analysis of Information Technologies in Master Programs of IT-Area	26
<i>Olga Ivanova</i>	
Software Engineering Education in Russian Federation: Specifics of Bachelor, Master, and Postgraduate Study Programs	38
<i>Gleb Radchenko, Ludmila Haluchenko and Ksenia Repina</i>	
Accordance with Professional Requirements and Didactic Units in the IT Sphere	50
<i>Vlada Zhernova, Igor Kaftannikov and Maria Lykova</i>	
Getting a PhD in Software Engineering in Germany and Especially at the University of Rostock	57
<i>Peter Forbrig</i>	
Focusing on Two Different Aspects of Collaboration in Software Engineering: Supporting Collaborative Modeling and Specifications of Collaborative Activities	64
<i>Peter Forbrig, Anke Dittmar, Gregor Buchholz and Mathias Kühn</i>	

Program Committee

Fawaz Alzghoul	University of Jordan
Peter Forbrig	University of Rostock
Vladimir Halin	Saint Petersburg State University
Igor Ilin	Peter the Great St. Petersburg Polytechnic University
Gleb Radchenko	South Ural State University
Janet Read	University of Central Lancashire
Ahmed Seffah	Lappeenranta University of Technology
Andrey Sozykin	Ural Federal University
Lene Sørensen	Aalborg University

Organizing Committee

Gleb Radchenko	South Ural State University
Timofey Epanchintsev	Ural Federal University
Andrey Sozykin	Ural Federal University
Dmitry Ustalov	Ural Federal University
Vlada Zhernova	South Ural State University