**Zoran Budimac, Bojana Koteska (Editors)**

# Eighth Workshop on Software Quality Analysis, Monitoring, Improvement, and Applications

# SQAMIA 2019

**Ohrid, North Macedonia, 22 – 25. 09. 2019**

# Proceedings

Department of mathematics and informatics
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# Preface

This volume contains papers presented at the Eighth Workshop on Software Quality Analysis, Monitoring, Improvement, and Applications (SQAMIA 2019). SQAMIA 2019 was held during 22 – 25. 09. 2019, at Hotel "Tino Sveti Stefan" in Ohrid, North Macedonia.

SQAMIA 2019 continued the tradition of successful SQAMIA workshops previously held in Novi Sad, Serbia (in 2012, 2013 and 2018), Lovran, Croatia (2014), Maribor, Slovenia (2015), Budapest, Hungary (2016) and Belgrade, Serbia (2017). The first SQAMIA workshop was organized within the 5th Balkan Conference in Informatics (BCI 2012). In 2013, SQAMIA became a standalone event intended to be an annual gathering of researchers and practitioners in the field of software quality.

The main objective of the SQAMIA series of workshops is to provide a forum for presentation, discussion and dissemination of the latest scientific achievements in the area of software quality, and to promote and improve interaction and collaboration among scientists and young researchers from the region and beyond. The workshop especially welcomes position papers, papers describing work in progress, tool demonstration papers, technical reports, and papers designed to provoke debate on present knowledge, open questions, and future research trends in software quality.

The SQAMIA 2019 workshop consisted of regular sessions with technical contributions reviewed and selected by an international program committee, In total 18 papers were accepted and published in this proceedings volume. All published papers were at least double reviewed, and in some cases even quadruple reviewed. We are grateful to all PC members for submitting careful and timely opinions on the papers.

Our special thanks are also addressed to the members of the SQAMIA Initiative (`sqamia.org`) without who this and previous workshops could not be possible: Zoran Budimac (Novi Sad, Serbia), Tihana Galinac Grbac (Pula, Croatia), Marjan Heričko (Maribor, Slovenia), Zoltán Horváth (Budapest, Hungary) and Hannu Jaakkola (Pori, Finland)

We extend special thanks to the SQAMIA 2019 Organizing Committee from the Faculty of Computer Science and Engineering, Ss. Cyril and Methodius University, Skopje, North Macedonia and the Department of Mathematics and Informatics, Faculty of Sciences, University of Novi Sad, especially to Bojana Koteska for her hard work and dedication to make this workshop the best it can be. Further we'd like to thank Doni Pracner for his patience and diligent work on making the proceedings.

And last, but not least, we thank all the participants of SQAMIA 2019 for their contributions that made all the work that went into SQAMIA 2019 worthwhile.

September 2019 *Zoran Budimac, Bojana Koteska*

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