ITAT 2019 Proceedings

19th Conference on Information Technologies – Applications and Theory
Hotel Zornička, Donovaly,Slovakia, September 20–24, 2019.

Preface

ITAT (Information Technologies—Applications and Theory) is a traditional Czecho-Slovak conference gathering scientists and experts working within a broad scope of computer science. ITAT not only offers a possibility to exchange ideas and information, it also emphasizes informal communication and discussions among participants.

In 2013 at the 13th ITAT, several small accompanying workshops were introduced as a part of the conference for the first time. The popularity of such workshops has grown in the following years and they also started to attract more international submissions. At the same time, the number of submissions to the ITAT conference itself has been decreasing steadily (and also declining in quality) to the point where last year at the 18th ITAT, more than 80 % of the papers were submitted to accompanying workshops rather than to the main conference track. Based on this development, the ITAT steering commitee has decided to discontinue the main track of the conference and transform ITAT to the *collection of specialized international workshops.* This change is symbolically taking place at Donovaly, a mountain resort between the Veĺká Fatra National Park and the Low Tatras National Park, where the workshops were introduced for the first time in 2013.

We have not taken this decision lightly and we realize that it may prevent some authors to contribute to ITAT in future. On the other hand, we strongly believe that this change will help to significantly increase the quality of the feedback received by the authors, who are primarily PhD students and young researchers. We believe that by focusing on smaller number of areas of interest, we will be able to secure internationally recognized expert reviewers in the workshop areas, which in turn will not only improve the papers under review, but also contribute to a higher quality of future papers by the ITAT authors, no matter whether submitted again to ITAT workshops or to other international events. Despite its Czecho-Slovak origin, due to the increased interest, workshop organizers have got the opportunity to open their workshops for participants from other countries as well.

This year, two traditional workshops *SloNLP – Slovakoczech Natural Language Processing* and *Computational Intelligence and Data Mining* have been complemented by a new workshop on *Intelligent Speech and Audio Technologies.* More information about the workshops can be found in the introductions to the respective parts of the proceedings. Initially, another workshop on *Data Science for Intrusion Detection and Digital Forensic* was planned, but it was cancelled by the organizers due to low number of submissions.

Continuing a long-standing ITAT tradition, in the collection-of-workshops setting, the *best paper award* sponsored by *PROFINIT* has been selected in two phases. First, the workshop organizers proposed the best paper for their workshops, typically based on the results of the peer review process. Second, these papers were assessed by a committee of seven senior scientists (from three countries and six universities) from among the workshop organizers and the ITAT steering committee.

Steering committee of the ITAT series of conferences:

- Peter Gurský, Pavol Jozef Šafárik University in Košice, Slovakia

- Martin Holeňa, Czech Academy of Sciences, Czech Republic

- Tomáš Horváth, Pavol Jozef Šafárik University in Košice, Slovakia

- Markéta Lopatková, Charles University in Prague, Czech Republic

- Tomáš Vinař, Commenius University in Bratislava, Slovakia

Organizing committee of ITAT 2019:

- Lubomír Antoni, Pavol Jozef Šafárik University in Košice, Slovakia

- Peter Gurský, Pavol Jozef Šafárik University in Košice, Slovakia

- Alexander Szabari, Pavol Jozef Šafárik University in Košice, Slovakia

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