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Preface

The ICT Innovations 2017 conference created and managed a vibrant environment, where participants shared the latest discoveries and best practices, and learned about data-driven innovation. The conference promoted the development of models, methods, and instruments of data science and provided a unique environment for the presentation and discussion of new approaches and prototypes in the field.

ICT Innovations conferences are organized by the Association for Information and Communication Technologies (ICT-ACT), whose mission is the advancement of ICT technologies. The main co-organizer and supporter of the 9th International ICT Innovations conference was the Faculty of Computer Science and Engineering and Ss. Cyril and Methodius University in Skopje, Macedonia.

The special conference topic was “data-driven innovation”. Data-driven innovation forms a key pillar in the 21st-century sources of growth. The confluence of several trends, including the increasing migration of socio-economic activities to the Internet and the decline in the cost of data collection, storage, and processing, are leading to the generation and use of huge volumes of data. These large datasets are becoming a core asset in research and economics, fostering new discoveries, new industries, new processes, and new products. Data innovation is happening everywhere. It is transforming how and what people purchase, and how they communicate and collaborate. In response, data and analytics are being used to motivate radical new business models and disrupt traditional industry structures. Outperforming organizations will be those that make data and analytics central to their innovation processes, as well as to the innovation itself. Data promises to provide the input for creative endeavors and new ideas. But the importance of data and analytics will transcend ideation and inspiration. The conference also focused on a variety of ICT fields like: big data analytics, cloud computing, data mining, digital signal processing, e-health, embedded systems, emerging mobile technologies, multimedia, Internet of Things, machine learning, software engineering, security and cryptography, coding theory, wearable technologies, wireless communication, sensor networks, and other related topics.

The ICT Innovations 2017 received 90 submissions from 232 authors coming from 22 different countries. All these submissions were peer reviewed by the ICT Innovations 2017 Program Committee consisting of 260 high-quality researchers coming from 56 different countries. In order to assure a high-quality and thoughtful review process, we assigned each paper to more than five reviewers, resulting in 5.1 average assigned reviewers per paper, and at the end of the review process, there were 4.26 reviews per paper. Based on the results from the peer reviews, 26 full papers were accepted, resulting in a 28.8% acceptance rate, which was within our goal of less than 30%.

ICT Innovations 2017 was held in Skopje at two locations, the Hotel Aleksandar Palace and the Faculty of Computer Science and Engineering, during September 18–23, 2017.
Preface

We would like to express sincere gratitude to the invited speakers for their inspirational talks, to the authors for submitting their work to this conference, and the reviewers for sharing their experience during the selection process. Special thanks to Aleksandra Popovska Mitrović, Vladimir Ždraveski, and Milos Jovanović for their technical support during the conference and their help during the preparation of the conference proceedings.

September 2017

Dimitar Trajanov
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ICT Innovations 2017 was organized by the Association for Information and Communication Technologies (ICT-ACT).

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Contents

Invited Keynote Paper

Video Pandemics: Worldwide Viral Spreading of Psy’s Gangnam Style Video ................................................................. 3
  Zsófia Kallus, Dániel Kondor, József Stéger, István Csabai, Eszter Bokányi, and Gábor Vattay

Proceeding Papers

A Secure Discharging Protocol for Plug in Electric Vehicle (SDP-V2G) in Smart Grid ........................................................... 15
  Khaled Shuaib, Juhar Ahmed Abdella, Ezedin Barka, and Farag Sallabi

ECGalert: A Heart Attack Alerting System .................................................. 27
  Marjan Gusev, Aleksandar Stojmenksi, and Ana Guseva

An Event-Based Messaging Architecture for Vehicular Internet of Things (IoT) Platforms .................................................. 37
  Meera Aravind, Gustav Wiklander, Jakob Palmheden, and Radu Dobrin

Internet of Things Based Solutions for Road Safety and Traffic Management in Intelligent Transportation Systems .................... 47
  Arnav Thakur, Reza Malekian, and Dijana Capeska Bogatinoska

Local Diffusion Versus Random Relocation in Random Walks .............. 57
  Viktor Stojkoski, Tamara Dimitrova, Petar Jovanovski, Ana Sokolovska, and Ljupco Kocarev

Network-Dependent Server Performance Analysis of HTTP Adaptive Streaming ................................................................. 67
  Sasho Gramatikov

Universal Large Scale Sensor Network .................................................. 79
  Jakob Schaerer, Severin Zumbrunn, and Torsten Braun

FPGA Implementation of a Dense Optical Flow Algorithm Using Altera OpenCL SDK. ......................................................... 89
  Umut Ulutas, Mustafa Tosun, Vecdi Emre Levent, Duygu Büyükkaydın, Toyygar Akgün, and H. Fatih Ugurdag

Persistent Random Search on Complex Networks ................................ 102
  Lasko Basnarkov, Miroslav Mirchev, and Ljupco Kocarev
Weed Detection Dataset with RGB Images Taken Under Variable Light Conditions ................................................................. 112
   Petre Lameski, Eftim Zdravevski, Vladimir Trajkovik, and Andrea Kulakov

Influence of Algebraic T-norm on Different Indiscernibility Relationships in Fuzzy-Rough Rule Induction Algorithms .................. 120
   Andreja Naumoski, Georgina Mirceva, and Kosta Mitreski

An Investigation of Human Trajectories in Ski Resorts ...................... 130
   Boris Delibašić, Sandro Radovanović, Miloš Jovanović, Milan Vukićević, and Milija Suknović

Courses Content Classification Based on Wikipedia and CIP Taxonomy .... 140
   Atanas Dimitrovski, Ana Gjorgjevikj, and Dimitar Trajanov

Tendencies and Perspectives of the Emotions Usage in Robotics .......... 154
   Vesna Kirandziska and Nevena Ackovska

Image Retrieval for Alzheimer’s Disease Based on Brain Atrophy Pattern ... 165
   Katarina Trojacanec, Slobodan Kalajdziski, Ivan Kitanovski, Ivica Dimitrovski, Suzana Loshkovska, for the Alzheimer’s Disease Neuroimaging Initiative

Addressing Item-Cold Start Problem in Recommendation Systems
Using Model Based Approach and Deep Learning ............................ 176
   Ivica Obadić, Gjorgji Madjarov, Ivica Dimitrovski, and Dejan Gjorgjevikj

Predictive Clustering of Multi-dimensional Time Series Applied to Forest Growing Stock Data for Different Tree Sizes ....................... 186
   Valentin Gjorgjioski, Dragi Kocev, Andrej Bončina, Sašo Džeroski, and Marko Debeljak

New Decoding Algorithm for Cryptcodes Based on Quasigroups
for Transmission Through a Low Noise Channel ............................ 196
   Aleksandra Popovska-Mitrovikj, Verica Bakeva, and Daniela Mechkaroska

Authorization Proxy for SPARQL Endpoints ............................... 205
   Riste Stojanov and Milos Jovanovik

Number of Errors that the Error-Detecting Code Surely Detects .......... 219
   Nataša Ilievska
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representation of Algebraic Structures by Boolean Functions and Its Applications</td>
<td>229</td>
</tr>
<tr>
<td><em>Smile Markovski, Verica Bakeva, Vesna Dimitrova, and Aleksandra Popovska-Mitrovikj</em></td>
<td></td>
</tr>
<tr>
<td>Software Quality Metrics While Using Different Development Methodologies</td>
<td>240</td>
</tr>
<tr>
<td><em>Simona Tudjarova, Ivan Chorbev, and Boban Joksimoski</em></td>
<td></td>
</tr>
<tr>
<td>Reflections on Data-Driven Risk Valuation Models for MSMEs Based on Field Research</td>
<td>251</td>
</tr>
<tr>
<td><em>Jasmina Trajkovski and Ljupcho Antovski</em></td>
<td></td>
</tr>
<tr>
<td>The Model for Gamification of E-learning in Higher Education Based on Learning Styles</td>
<td>265</td>
</tr>
<tr>
<td><em>Nadja Zaric, Snezana Scepanović, Tijana Vujicic, Jelena Ljucovic, and Danco Davcev</em></td>
<td></td>
</tr>
<tr>
<td>Behavioral Targeted vs Non-targeted Online Campaign in Macedonia</td>
<td>274</td>
</tr>
<tr>
<td><em>Borce Dzurovski and Smilka Janeska-Sarkanjac</em></td>
<td></td>
</tr>
<tr>
<td><strong>Author Index</strong></td>
<td>285</td>
</tr>
</tbody>
</table>