Special Discussion Section and Exhibition (Industrial Centre) in frame of the International Conference on Information and Digital Technologies

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Abstract— The project "Exhibition and Special Discussion Section on Information and Digital Technologies" (ID 21830315) has been supported by International Visegrad Fund. The project goal is organization of the special section and exhibition for IT companies and applicants (named as the Industrial Centre of the International Conference on Information and Digital Technologies). The Exhibition and Special Discussion Section held in framework of the International Conference on Information and Digital Technologies 25-27 June 2019 in Zilina, Slovakia (http://idt.conf.sk)

Keywords— International Visegrad Fund, International Conference, Exhibition, Industrial Centre, Information and Digital technologies.

I. THE PROJECT GOAL

The exponential growth in information, business re-engineering to improve effectiveness, and globalization are all contributing to the complexity of our world that causes the application of Information and Digital Technologies (IDT) in all areas of human activities. IDT intensive uses and their developments grow new paradigms as Industry 4.0. The conception of Industry 4.0 covers all sectors including the daily social life in fact as if it seems that it effects only factories. IDT are expected to grow significantly in the next years under conception Industry 4.0, creating a market of more than US \$2000bn in 2020 [1]. IDT development is one of items in important national and international programs, and the Visegrad Group Countries too [2]. Currently IDT are extensive multidisciplinary area of knowledge. A lot of scientific and academic centres with different specializations are involved in IDT development that necessitates multilateral cooperation. International events as conferences and workshops on IDT are important possibility to create and start the cooperation of academic, research centres and IT companies. The Int. Conf. on IDT (http://idt.conf.sk) can be used to create the platform for the stable cooperation of academic community and IT-companies and propagation of this cooperation results.

The overall project goal is to improve the cooperation of industrial and research partners in region of V4 countries. Therefore we plan to organize the platform for this cooperation in form of special section and exhibition at the Conference IDT. The use of the Conference IDT will guarantee the sustainability of this platform which will be exist after the project finishing. The contribution in building of cooperation of academic centres and IT companies in V4 region can be possible by the use of the potential of the Conference IDT by: 1. the familiarization with new tendencies in science; 2. the propagation their achievements among the science

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community; 3. int. cooperation; 4. the involving of IT enterprises in the cooperation with academic institutes.

The special section and exhibition (Industrial Centre of the IDT Conference) will be saved and developed as the organization part of the next conferences IDT. Most of the project participants are organizers of the Conference therefore they will support the development of this Centre together with the Conference. The information about the Industrial Centre will be include in Call for Paper of next conference IDT. Dissemination of project results will be easily reached, due to the integration of the project partners in International research.

II. THE INDUSTRIAL CENTRE OF THE INTERNATIONAL CONFERENCE ON INFORMATION AND DIGITAL TECHNOLOGIES

The International Conference on Information and Digital Technologies (IDT) is traditionally held in countries of Visegrad region. Its primary goal is to bring together researches, developers, teachers from academic as well as from industrial world working in all areas of information and digital technologies. In an attempt to promote the dissemination of the most recent industrial developments and the interaction between industry and academia, IDT 2019 encouraged the submission of industry oriented technical applications. These special contributions were submitted and were presented in the frame of Industrial Centre supported by the International Visegrad Fund. The evaluation of these contributions addressed the innovation/originality of the industrial application, the quality of presentation, and the technical interest to the community working in that field.

Representatives of University of Žilina, VSB - Technical University of Ostrava, University of Debrecen, University of Rzeszow, University of Defence in Brno and Pavol Jozef Šafárik University in Košice organized the Special discussion section and Exhibition (Industrial Centre) from 25 to 27 June 2019 in Žilina, Slovakia. The organization was supported by International Visegrad Fund in the frame of the project no. 21830315. The University of Žilina was selected to host and organise the workshop because the city of Žilina is the geographic center of the V4 region.

The Industrial Centre [3] was focused on a wide range of applications of computerised systems. Topics of interest included but were not limited to: (a) Digital signal processing; (b) Communication and control systems and networks; (c) Measurement systems and instrumentations; (d) Hardware and software solutions; (e) Medical Image Analysis; (f) Computer-Aided Diagnosis; (g) Telemedicine, Telehealth; (h) Testing and fault-tolerant systems; (i) Risk and hazard analysis; (j) Education, e-learning etc.



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All presented works were reviewed by two or three external independent experts. The organizational team would like to thank all of them for their contribution to the improvement of quality of the accepted presentations and papers. The presented papers were indexed in well-known repositories including IEEE Xplore, Scopus and Web of Science.

The accepted and approved papers were organized into three plenary and nine working sections. More than 50 presenters created a very creative and productive atmosphere for more than 100 participants of the plenary and working sessions. More than 10 companies from Slovakia, Hungary, Poland, Russia, and Belgium had significant space for their own presentations with subsequent discussions at this academic-industrial event.





In the plenary sessions, distinguished invited speakers gave reviews of the future perspectives in their research areas including safety management, reliability, information technologies, and medical informatics. In particular, the following invited lectures were delivered by the speakers:

- prof. Paolo Soda from Campus Bio-Medico University in Roma, Italy with the lecture "Artificial intelligence meets clinical imaging for personalized medicine in oncology"
- prof. Min Xie from City University of Hong Kong, Hong Kong with the lecture "Opportunities and Challenges of the Reliability of AI Systems"





The **organizing** committee prepared also several cultural and social events that were held in a pleasant and friendly atmosphere.

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