Ministry of Education and Science of Ukraine
National Aerospace University "Kharkiv Aviation Institute"

Program of
International Workshop of IT-professionals on Artificial Intelligence
ProfIT AI 2021
(September, 20-21, 2021)

Kharkiv 2021

Program Committee

Chair:

Dmytro Chumachenko – National Aerospace University "Kharkiv Aviation Institute", Ukraine

Members:

Amedeo Buonanno – University of Campania Luigi Vanvitelli, Italy

Grygoriy Zholtkevych – V.N. Karazin Kharkiv National University, Ukraine

Ihor Korobiychuk – Warsaw University of Technology, Poland

Iurii Krak – Taras Shevchenko National University of Kyiv, Ukraine

Ivan Izonin – Lviv Polytechnic National University, Ukraine

Michael Yudelson – Carnegie Mellon University, USA

Michal Gregus – Comenius University in Bratislava, Slovak Republic

Natalia Kryvinska – Comenius University in Bratislave, Slovak Republic

Oleg Illiashenko – National Aerospace University "Kharkiv Aviation Institute", Ukraine

Oleksandr Sokolov – Nicolaus Copernicus University, Poland

Oleksii Rubel – National Aerospace University "Kharkiv Aviation Institute", Ukraine

Sergiy Gnatyuk – National Aviation University, Ukraine

Sergiy Yakovlev – National Aerospace University "Kharkiv Aviation Institute", Ukraine

Shankar Gangisetty – KLE Technological University, India

Vyacheslav Kharchenko – National Aerospace University "Kharkiv Aviation Institute", Ukraine

Yuriy Syerov – Lviv Polytechnic National University, Ukraine

Section 1
September, 20th, 2021
National Aerospace University "Kharkiv Aviation Institute"
class 233 (radio building)
14:00 – 16:00

1. "Models and Software for Intelligent Web-Based Testing System in Mathematics", *Andrey Chukhray, Elena Yashina*

2. "Structural alignment method of conceptual categories of ontology and formalized domain", *Eduard Mandziuk, Iurii Krak, Olexander Barmak, Olexander Mazurets, Vladyslav Kuznetsov, Olexander Pylypiak*

3. "Hybrid approaches to solving classification problems with constraints", *Oksana Pichugina, Olha Matsiy*

4. "Adaptive support of the educational process by the automated library information system", *Andriy Andrukhiv, Alina Petrushka, Yurii Kryvenchuk*

5. "The use of information and communication technologies as a means of analyzing public interest in historical events in Wikipedia regarding documenting the social and cultural sphere", *Tetiana Bilushchak, Viktoriia Dobrovolska, Iryna Ivanochko, Nataliia Boiko*

6. "The Concept of Decisions Support System to Mitigate the COVID-19 Pandemic Consequences based on Social and Epidemic Processes Intelligent Analysis", *Dmytro Boyko, Dmytro Chumachenko, Tetyana Chumachenko, Sergey Lvov, Artem Lytovchenko, Olena Muradyan, Grigoriy Zholtkevych*

Section 2
September, 21st, 2021
National Aerospace University "Kharkiv Aviation Institute"
class 203 (radio building)
10:00 – 12:00

1. "Intelligent Evaluation of the Informative Features of Cardiac Studies Diagnostic Data using Shannon Method", *Kseniia Bazilevych, Serhii Krivtsov, Mykola Butkevych*

2. "Method for Clusters and Classifying the Objects in Images", *Natalya Shakhovska, Oleksii Shamuratov*

3. "Machine Learning Approach to COVID-19 Epidemic Process Simulation using Polynomial Regression Model", *Darina Kapusta, Alireza Mohammadi, Dmytro Chumachenko*

4. "Performance evaluation of ML-based classifiers for HEI Graduate Entrants", *Khryshyna Zub, Pavlo Zhezhnych*

5. "Hyperplane Clustering of the Data in the Vector Space of Features Based on Pseudo Inversion Tools", *Iurii Krak, Hrygorii Kudin, Veda Kasianiuk, Mykola Efremov*

Section 3
September, 21st, 2021
National Aerospace University "Kharkiv Aviation Institute"
class 233 (radio building)
14:00 – 16:00

1. "The system of temperature and conditioning control in industrial grain storages", *Yurii Kryvenchuk, Maryana Zakharchuk, Oksana Chervinska, Olena Pylypiv, Hanna Shayner*

2. "Optimal Spatial Configurations Synthesis Using Visualization of the Decision-Making Process", *Sergiy Yakovlev, Oleksii Kartashov, Kyryl Korobchynskyi, Iryna Yakovleva, Olga Yarovaya*

3. "Intelligent Decision-Making in Conditions of Uncertainty in Games with Nature", *Pavlo Pyrohov, Ievgen Meniailov*

4. "Mathematical Model for the Optimization of the Airport selfService Kiosks System", *Gege Zhu, Iryna Ivanochko, Emilia Lehtinen, Tetiana Klynina*

5. "Method of user authentication by keyboard handwriting based on neural networks and genetic algorithm", *Andrii Pryimak, Yurii Yaremchuk, Olha Salieva, Nataliia Kunanets*

Closing Ceremony
September, 21st, 2021
National Aerospace University "Kharkiv Aviation Institute"
class 203 (radio building)
17:00 – 20:00