

## Program of the 5<sup>th</sup> International Conference on Computational Linguistics and Intelligent Systems

The Organizing Committee provides an opportunity for everyone to watch online the Conference opening (on April 22, from 10.00 to 10.40 AM) and plenary sessions (on April 22, from 10.50 to 12.00 AM and on April 23 from 10.00 to 12.00 AM) on CoLInS Facebook profile:

<https://www.facebook.com/Computational-Linguistics-and-Intelligent-Systems-Conference-1403297853078941>

<b>April 22<sup>nd</sup> 2021</b>	
<b>10.00 – 10.40</b>	
<b>Conference Opening</b>	
<b>Session Chairs: Nataliia Sharonova and Yevhen Kupriianov</b>	
<b>Zoom meeting:</b>	
<b><a href="https://us02web.zoom.us/j/85366465839?pwd=K05OdmpwT1FvWmY4VDVMT3VHanh2Zz09">https://us02web.zoom.us/j/85366465839?pwd=K05OdmpwT1FvWmY4VDVMT3VHanh2Zz09</a></b>	
<b>Conference ID: 853 6646 5839</b>	
<b>Password: 4uznWn</b>	
10.00 – 10.10	Prof., Dr. Nataliia Sharonova <i>National Technical University “Kharkiv Polytechnic Institute”</i>
10.10-10.20	Prof., Dr. Mykhailo Godlevskiy <i>National Technical University “Kharkiv Polytechnic Institute”</i>
10.20-10.30	Univ.-Prof. Dipl.-Ing. Dr. Andreas Bollin <i>Institute for Computer Science Didactics</i>
10.30-10.40	Ao.Univ.-Prof.I.R. Mag. Dr. Günther Fliedl <i>Institut für Artificial Intelligence und Cybersecurity</i>
<b>10.40 – 10.50</b>	
<b>BREAK</b>	
<b>10.50 – 12.00</b>	
<b>Plenary Section</b>	
<b>Session Chairs: Nataliia Sharonova and Yevhen Kupriianov</b>	
<b>Zoom meeting:</b>	
<b><a href="https://us04web.zoom.us/j/76370992518?pwd=TGpiRW1NK015NlZJZUU1TStrVis2dz09">https://us04web.zoom.us/j/76370992518?pwd=TGpiRW1NK015NlZJZUU1TStrVis2dz09</a></b>	
<b>Meeting ID: 763 7099 2518</b>	
<b>Passcode: 4fMLc4</b>	
11.00 – 11.20	Volodymyr Shyrovkov <i>“Accuracy” vs “Unambiguity” in Linguistics</i>
11.20 – 11.40	Thierry Hamon <i>Analysis of User Exchanges on Health Online Fora: User Profile Detection</i>

11.40 – 12.00	Yevgeniy Bodyanskiy, Alina Shafronenko and Iryna Klymova <i>Adaptive Recovery of Distorted Data Based on Credibilistic Fuzzy Clustering Approach</i>
<b>12.00 – 13.00</b> <b>BREAK</b>	

**13.00 – 16.30**

**Session 1. Knowledge-oriented Systems**

**Session Chairs: Olga Kanishcheva and Zoia Kochuieva**

**Join Zoom meeting**

**<https://us04web.zoom.us/j/76476885604?pwd=ekVFc3FVdGZhVDBqOVhudXFrbUFBZz09>**

**Conference ID: 764 7688 5604**

**Password: CNAP7i**

13.00 – 13.40	<p>Gennady Shepelev and Nina Khairova <i>Collective Risk Estimating Method for Comparing Poly-Interval Objects in Intelligent Systems</i></p> <p>Dmytro Sitnikov, Polina Sytnikova and Andrii Kovalenko <i>Methods of Eliminating Features from Linguistic Equations</i></p> <p>Igor Shubin <i>Development of Conjunctive Decomposition Tools</i></p> <p>Oleksii Kudryk, Oleg Bisikalo, Yuliia Oleksii and Serhii Radio <i>Intelligent Information System for Predicting Chemicals with Interactive Possibilities</i></p> <p>Iryna Gruzdo, Iryna Kyrychenko, Glib Tereshchenko and Nadiya Shanidze <i>Metrics Applicable for Evaluating Software at the Design Stage</i></p>
	<p style="text-align: center;"><b>Coffee break</b></p>
13.50 – 14.30	<p>Victor Chumakevych, Ivan Dyyak, Victoria Chumakevych, Igor Puleko and Vadym Ptashnyk <i>Approach to Solve the Problems of Filtration and Extrapolation in the Construction of Functionally Stable Stochastic Systems with Delay</i></p> <p>Maksym Makaruk, Alexei Nazarov, Igor Shubin and Nadezhda Shanidze <i>Knowledge Representation Method for Object Recognition in Nonlinear Radar Systems</i></p> <p>Ievgen Sidenko, Tetiana Misiuk, Galyna Kondratenko and Yuriy Kondratenko <i>Objects Segmentation in Augmented Reality Environment</i></p> <p>Nataliya Boyko and Andriy Pytel <i>Application of Genetic Algorithms for Optimization of Salesman's Tasks and their Modeling by Sequential Selection</i></p> <p>Lesia Mochurad <i>Optimization of Regression Analysis by Conducting Parallel Calculations</i></p>
	<p style="text-align: center;"><b>Lunch</b></p>
15.00 – 15.40	<p>Ignat Blazhko, Tetiana Kovaliuk, Nataliya Kobets and Tamara Tielysheva <i>The Multi-Pattern Matching with Online User Requests for Determining Browser Capabilities</i></p>

	<p>Andrii Vasyliuk, Taras Basyuk <i>Construction Features of the Industrial Environment Control System</i></p> <p>Alexander Shportko and Veronika Postolatii <i>Development of Predictors to Increase the Efficiency of Progressive Hierarchic Context-Independent Compression of Images without Losses</i></p> <p>Volodymyr Burdaiev <i>On One Approach to Building a Temporal Model of the Knowledge Base</i></p> <p>Alina Petrushka and Maria Komova <i>Negative Citing: Scenario Analysis of Inaccurate Evaluation of Scientific Content</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Vasyl Lytvyn, Olesya Pashchetnyk, Oleg Klymovych, Leonid Polishchuk, Ihor Kolb, Yevhen Burov and Victoria Vysotska <i>Assessment of the Hydro-Meteorological Conditions Impact on the Combat Troops Operations Preparation and Conduct in the Geo-Information Subsystem Of the Automated Battlefield Management System</i></p> <p>Olesya Pashchetnyk, Vasyl Lytvyn, Vyacheslav Zhyvchuk, Leonid Polishchuk, Victoria Vysotska, Zoriana Rybchak and Yulia Pukach <i>The Ontological Decision Support System Composition and Structure Determination for Commanders of Land Forces Formations and Units in Ukrainian Armed Forces</i></p> <p>Yurii Matseliukh, Myroslava Bublyk and Victoria Vysotska <i>Development of Intelligent System For Visual Passenger Flows Simulation of Public Transport in Smart City Based on Neural Network</i></p> <p>Myroslava Bublyk, Volodymyr Mykhailov, Yurii Matseliukh, Tetiana Pihniak, Andrii Selskyi and Igor Grybyk <i>Change Management in R&amp;D-quality Costs in Challenges of the Global Economy</i></p> <p>Volodymyr Korolov, Olha Korolova, Igor Milkovich, Yaroslav Zaiets, Viacheslav Zhyvchuk, Vasyl Lytvyn and Myroslava Bublyk <i>Information-reference System Creation Prerequisites for the Ground Forces Identification on the Battlefield according to NATO Standards</i></p>
<b>13.00 – 16.30</b>	
<b>Session 2. Applied Intelligent Systems</b>	
<b>Session Chairs: Svitlana Petrasova and Oksana Ivashchenko</b>	
<b>Join Zoom meeting:</b>	
<b><a href="https://us04web.zoom.us/j/5716961136?pwd=K2tRQUJpa3RUU1lkY0VFNlBxb3J3dz09">https://us04web.zoom.us/j/5716961136?pwd=K2tRQUJpa3RUU1lkY0VFNlBxb3J3dz09</a></b>	
<b>Meeting ID: 571 696 1136</b>	
<b>Password: 333333</b>	
13.00 – 13.40	<p>Volodymyr Sokol, Mariia Bilova, Andrii Druzhynin, Nikita Cherkun and Ivan Perepelytsia <i>An Adaptive Algorithm for Effective Selection of Training Content for IT Professionals</i></p>

	<p>Igor Shubin, Andrii Kozyriev, Volodymyr Liashik and Grigorii Chetverykov <i>Methods of Adaptive Knowledge Testing Based on the Theory of Logical Networks</i></p> <p>Serhii Lienkov, Sergii Gakhovych, Igor Tolok, Genadiy Zhyrov and Valentyn Bakhvalov <i>An Option of Building the Distance Learning System with Artificial Intelligence Elements</i></p> <p>Olha Pronina and Olena Piatykop <i>The Decision Support System Education Career Choice Using Fuzzy Model</i></p>
	<b>Coffee break</b>
13.50 – 14.30	<p>Oleksandr Romanovskyi, Nina Pidbutska and Anastasiia Knysch <i>Elomia Chatbot: the Effectiveness of Artificial Intelligence in the Fight for Mental Health</i></p> <p>Rostyslav Yurynets, Zoryna Yurynets, Mykola Denysenko, Ivanna Myshchysyn and Andriy Pekhnyk <i>The Influence of Educational Competencies of the Staff on the Efficiency of Hotel Companies in the Tourism Sector</i></p> <p>Andrii Yarovyi and Dmytro Kudriavtsev <i>Method of Multi-Purpose Text Analysis Based on a Combination of Knowledge Bases for Intelligent Chatbot</i></p> <p>Yelyzaveta Meleshko, Mykola Yakymenko and Serhii Semenov <i>A Method of Detecting Bot Networks Based on Graph Clustering in the Recommendation System of Social Network</i></p> <p>Oksana Pichugina <i>Attributed Networks Formation Models with Application in Social Network Analysis</i></p>
	<b>Lunch</b>
15.00 – 15.40	<p>Andrii Kopp, Dmytro Orlovskyi and Sergey Orekhov <i>An Approach and Software Prototype for Translation of Natural Language Business Rules into Database Structure</i></p> <p>Iryna Spivak, Svitlana Krepych, Oleksandr Fedorov and Serhii Spivak <i>Approach to Recognizing of Visualized Human Emotions for Marketing Decision Making Systems</i></p> <p>Iryna Kyrychenko, Natalija Sharonova and Glib Tereshchenko <i>Application of Big Data Methods in E-Learning Systems</i></p> <p>Sergey Orekhov, Henadii Malyhon, Nataliia Stratiienko and Tetiana Goncharenko <i>Software Development for Semantic Kernel Forming</i></p>

	<p>Yevhen Bodnia and Mariia Kozulia <i>Web Application System of Handwritten Text Recognition</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Liubov Halkiv, Oleh Karyy, Ihor Kulyniak, Yaroslav Kis and Anastasiia Tsapulych <i>The National System of Higher Education and the State Order for its Services as Activators of the Development of it Entrepreneurship</i></p> <p>Nadiia Pasiaka, Yulia Romanyshyn, Svitlana Chupakhina, Mariia Oliinyk and Mykola Pasiaka <i>Activation of the Educational Process by Changing the Curriculum in Higher School</i></p> <p>Zhanna Myna and Tetiana Bilushchak <i>Social Networks as Tools to Promote the Majors of Higher Education Institutions During the Pandemic</i></p> <p>Tetiana Bilushchak and Ivan Bratus <i>Teaching in the Internet Environment against the Background of COVID-19: Integration of Video Content into E-learning</i></p> <p>Oksana Oborska, Vasyl Andrunyk, Liliya Chyrun, Ruslan Hasko, Anatolii Vysotskyi, Solomiia Mushasta, Oksana Petruchenko and Iryna Shakleina <i>The Intelligent System Development for Psychological Analysis of the Person's Condition</i></p>
<b>13.00 – 16.30</b>	
<b>Session 3. Natural Language Processing</b>	
<b>Session Chair: Nina Khairova and Anastasiia Kolesnyk</b>	
<b>Join Zoom meeting</b>	
<b><a href="https://us04web.zoom.us/j/78892188769?pwd=S1IFYmVBODINMFlkSFNXXKzhnVVJQdz09">https://us04web.zoom.us/j/78892188769?pwd=S1IFYmVBODINMFlkSFNXXKzhnVVJQdz09</a></b>	
<b>Meeting ID: 788 9218 8769</b>	
<b>Password: 3c3hE2</b>	
13.00 – 13.40	<p>Henning Schöpfer, Kersten Wolfgang <i>Using Natural Language Processing for Supply Chain Mapping: a Systematic Review of Current Approaches</i></p> <p>Dmytro Lande, Oleh Dmytrenko <i>Using Part-Of-Speech Tagging for Building Networks of Terms in Legal Sphere</i></p> <p>Mamata Das, Selvakumar K. and Pja Alphonse <i>A Comparative Study on TF-IDF Feature Weighting Method and Its Analysis Using Unstructured Dataset</i></p> <p>Nina Khairova, Anastasiia Kolesnyk, Orken Mamyrbayev, Galiya Ybytayeva and Yuliia Lytvynenko <i>Automatic Multilingual Ontology Generation Based on Texts Focused on Criminal Topic</i></p>

	<p>Yuliia Hlavcheva, Olga Kanishcheva, Maryna Vovk and Maksym Glavchev <i>Identification of the Author's Idea Based on the Modified TextRank Method</i></p>
	<b>Coffee break</b>
13.50 – 14.30	<p>Nataliia Kunanets, Yurii Oliinyk, Dmytro Myhal, Khrystyna Shunevych, Antonii Rzheskyi, and Yuriy Shcherbyna <i>Enhanced LSA Method with Ukraine Language Support</i></p> <p>Oleksii V. Shatalov and Nataliya V. Ryabova <i>Towards Russian Text Generation Problem Using OpenAI's GPT-2</i></p> <p>Kyrylo Smelyakov, Anastasiya Chupryna, Dmytro Darahan and Serhii Midina <i>Effectiveness of Modern Text Recognition Solutions and Tools for Common Data Sources</i></p> <p>Marta Karp, Natalia Kunanets and Yuliia Kucher <i>Meiosis and Litotes in the Catcher in the Rye by Jerome David Salinger: Text Mining</i></p> <p>Olena Kuropiatnyk and Viktor Shynkarenko <i>Automation of Template Formation to Identify the Structure of Natural Language Documents</i></p>
	<b>Lunch</b>
15.00 – 15.40	<p>Oleg Krupii, Kostiantyn Kasian <i>A Neural Network-Based Study of the Performance of a Developed Foreign Language Teaching System</i></p> <p>Dmytro Nazarenko, Iryna Afanasieva, Nataliia Golian and Vira Golian <i>Investigation of the Deep Learning Approaches to Classify Emotions in Texts</i></p> <p>Alla Taran <i>Terminology of Computational Linguistics in Terms of Indexing and Information Retrieval in the System "iSybislaw"</i></p> <p>Larysa Savytska, Nataliya Vnukova, Iryna Bezugla, Vasyl Pyvovarov and M. Turgut Sübay <i>Using Word2vec Technique to Determine Semantic and Morphologic Similarity in Embedded Words of the Ukrainian Language</i></p> <p>Eugene Panferov <i>A Next Generation Data Language Proposal</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Zoia Kochuieva, Natalia Borysova, Karina Melnyk and Dina Huliieva <i>Usage of Sentiment Analysis to Tracking Public Opinion</i></p> <p>Olesia Barkovska, Daria Pyvovarova, Vladyslav Kholiev, Heorhii Ivashchenko and Dmytro Rosinskiy <i>Information Object Storage Model with Accelerated Text Processing Methods</i></p> <p>Mykola Sazhok, Anna Poltyeva, Valentyna Robeiko, Ruslan Seliukh and Dmytro Fedoryn <i>Punctuation Restoration for Ukrainian Broadcast Speech Recognition System Based on Bidirectional Recurrent Neural Network and Word Embeddings</i></p>

	<p>Victoria Vysotska, Svitlana Holoshchuk and Roman Holoshchuk <i>A Comparative Analysis for English and Ukrainian Texts Processing Based on Semantics and Syntax Approach</i></p> <p>Kateryna Tymoshenko, Victoria Vysotska, Oksana Kovtun, Roman Holoshchuk and Svitlana Holoshchuk <i>Real-Time Ukrainian Text Recognition and Voicing</i></p>
<p><b>13.00 – 16.30</b></p> <p><b>Session 4. Corpus Technologies, Ontologies and Computer Lexicography</b></p> <p><b>Session Chairs: Yevhen Kupriianov and Natalia Borysova</b></p>	
<p><b>Join Zoom meeting:</b></p> <p><b><a href="https://us04web.zoom.us/j/76370992518?pwd=TGpiRW1NK015NlZJZUU1TStrVis2dz09">https://us04web.zoom.us/j/76370992518?pwd=TGpiRW1NK015NlZJZUU1TStrVis2dz09</a></b></p> <p><b>Meeting ID: 763 7099 2518</b></p> <p><b>Passcode: 4fMLc4</b></p>	
13.00 – 13.40	<p>Yevhen Kupriianov, Volodymyr Shyrovkov, Iryna Ostapova and Mykyta Yablochkov <i>Digital Toolkit to Develop Research Potential of Explanatory Dictionary (Case of Spanish Language Dictionary)</i></p> <p>Olga Cherednichenko, Olga Kanishcheva <i>Readability Evaluation for Ukrainian Medicine Corpus (UKRMED)</i></p> <p>Yevhen Burov <i>Knowledge Based Situation Awareness Process Based on Ontologies</i></p> <p>Alla Luchyk, Oksana Taran, Oleksandra Palchevska, Natalia Sharmanova, Ganna Demydenko <i>Corpus-Driven Approach to Ukrainian E-anecdotes Study</i></p> <p>Vasyl Starko <i>Implementing Semantic Annotation in a Ukrainian Corpus</i></p>
<p><b>Coffee break</b></p>	
13.50 – 14.30	<p>Hanna Sytar, Oleh Vietrov and Vladyslava Diachenko <i>Synonymizer of the Ukrainian Language: Stage of Creation, Features of Database Update and Software Implementation</i></p> <p>Olena Andrushenko <i>On Marking NPs by Exclusive Only in EEBO Corpus: Syntactic and Information Structural Considerations</i></p> <p>Alona Dorozhynska <i>Formal Model of Explanatory Trilingual Terminology Dictionary</i></p> <p>Nataliia Lototska <i>Statistical Research of the Colour Component Чорний (Black) in Roman Ivanychuk's Text Corpus</i></p> <p>Viktor Hryhorovych <i>Construction of Semantic Metric for Measuring the Distance Between Ontology Concepts</i></p>



	<b>Lunch</b>
15.00 – 15.40	<p>Andriy Lutsiv, Roman Lutsyshyn <i>Corpus-Based Translation Automation in Adaptable Corpus Tool Translation Module</i></p> <p>Taras Basyuk, Andrii Vasyliuk <i>Approach to a Subject Area Ontology Visualization System Creating</i></p> <p>Viktor Shynkarenko and Larysa Zhuchyi <i>Ontological Harmonization of Railway Transport Information Systems</i></p> <p>Oksana Tyshchenko and Vladyslav Tyshchenko <i>Electronic System "All-Ukrainian Toloka Archival Card Index": Structure, Tools, Prospects of Development</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Lubomyr Petryshyn, Mykhailo Petryshyn <i>Visualization Modeling of Management Processes in Knowledge-oriented Systems</i></p> <p>Anna Bakurova, Mariia Pasichnyk and Elina Tereschenko <i>Development of a Productive Credit Decision-making System Based on the Ontology Model</i></p> <p>Tetiana Anokhina, Iryna Kobyakova and Svitlana Shvachko <i>Testing Tools for Writing and Publishing E-dictionaries</i></p> <p>Oksana Zbanatska, Oksana Tur, Ksenia Sizova <i>Informational Retrieval Thesaurus of Yaroslav Mudryi National Library of Ukraine: Content, Structure, and Use</i></p>
<b>April 23<sup>rd</sup> 2021</b>	
<b>10.00 – 12.00</b>	
<b>Plenary Session</b>	
<b>Session Chairs: Nataliia Sharonova and Yevhen Kupriianov</b>	
<b>Zoom meeting:</b>	
<b><a href="https://us04web.zoom.us/j/76370992518?pwd=TGpiRW1NK015NlZJZUU1TStrVis2dz09">https://us04web.zoom.us/j/76370992518?pwd=TGpiRW1NK015NlZJZUU1TStrVis2dz09</a></b>	
<b>Meeting ID: 763 7099 2518</b>	
<b>Passcode: 4fMLc4</b>	
10.00 – 10.20	Olena Levchenko, Oleh Tyshchenko and Marianna Dilai <i>Automated Identification of Metaphors in Annotated Corpus (Based on Substance Terms)</i>
10.20 – 10.40	Maria Shvedova and Ruprecht von Waldenfels <i>Regional Annotation within GRAC, a Large Reference Corpus of Ukrainian: Issues and Challenges</i>
10.40 – 11.00	Lubomyr Demkiv <i>Intelligent Real-time Control of Electrical Vehicle's Wheel</i>
11.20 – 11.40	Dmytro Chumachenko, Sergey Yakovlev <i>Intelligent System of Epidemic Situation Monitoring and Control</i>
11.40 – 12.00	Abdullah Al Mutawa <i>Machine Learning for Arabic Text to Speech Synthesis: a Tacotron Approach</i>

<b>12.00 – 13.00</b>	
<b>BREAK</b>	
<b>13.00 – 16.30</b>	
<b>Session 5. Math Tools of Artificial Intelligence</b>	
<b>Session Chairs: Olga Cherednichenko and Karina Melnyk</b>	
<b>Join Zoom meeting</b>	
<b><a href="https://us02web.zoom.us/j/83706906816?pwd=UEExWM1RBnFpxRGN3OGZmTlgvRTZEUT09">https://us02web.zoom.us/j/83706906816?pwd=UEExWM1RBnFpxRGN3OGZmTlgvRTZEUT09</a></b>	
<b>Conference ID: 837 0690 6816</b>	
<b>Password: 2021</b>	
13.00 – 13.40	<p>Oleksii Duda, Volodymyr Pasichnyk, Halyna Lypak, Nataliia Veretennikova, Nataliia Kunanets, Oleksandr Matsiuk and Valentyna Mudrokha <i>Formation of Integrated Repositories of Social and Communication Data by Consolidating the Resources of Museums, Libraries and Archives in Smart Cities Projects</i></p> <p>Roman Bakhmut, Nataliia Kunanets, Antonii Rzhеuskyi, Volodymyr Pasichnyk, Vasyl Kut, Oleksandr Volkov and Ivan Tsmots <i>Formation of Virtual Tours with the Use of Augmented Reality Information Technology</i></p> <p>Olga Cherednichenko, Maryna Vovk, Oksana Ivashchenko, Alenka Baggia and Nataliia Stratiienko <i>Improving Item Searching on Trading Platform Based on Reinforcement Learning Approach</i></p> <p>Andrii Sokolov, Oksana Sokolova and Viktor Khodakov <i>The Criterion of Optimality in the Convex Vector Problem of Optimization</i></p> <p>Mykola Korablyov, Natalia Axak, Oleksandr Fomichov, Volodymyr Hnidenko <i>Multi-agent Clinical Decision Support System Using Case-based Reasoning</i></p>
<b>Coffee break</b>	
13.50 – 14.30	<p>Nestor Shpak, Kateryna Doroshkevych, Yuriy Shpak, Ihor Salata and Marharyta Sharko <i>Strategy and Tactics of International Digitalization and Intellectualization of Economic Relations</i></p> <p>Oleh Veres, Pavlo Ilchuk, Olha Kots and Lidiia Bondarenko <i>Big Data Analysis for Structuring FX Market Volatility due to Financial Crises and Exchange Rate Overshooting</i></p> <p>Nestor Shpak, Oksana Mykytiuk, Zoriana Dvulit, Liana Maznyk and Natalia Horbal <i>Simulation the Attractiveness of Transport Services as a Tool for Assessing Consumer Loyalty in the Digital Epoch</i></p> <p>Nestor Shpak, Liana Maznyk, Zoriana Dvulit, Oksana Mykytiuk and Tatiana Melnyk <i>Simulation the Impact of Eco Expenditure on the Effectiveness of Eco Projects: the Railways of Ukraine Case</i></p>

	<b>Lunch</b>
15.00 – 15.40	<p>Mykola Odrekhivskiy, Uliana Kohut and Ulyana Kostyuk <i>Intelligent Management System for Ecological Innovative Enterprises</i></p> <p>Valentina Moskalenko and Nataliia Fonta <i>The Method of Constructing a Development Trajectory as the Basis of an Intelligent Module for Strategic Planning of the EPM System</i></p> <p>Oleksandr Markovets, Roman Holoshchuk, Svitlana Holoshchuk and Nestor Dumanskyi <i>CRM System and Consolidated Information Resource: Ways of Creation and Interaction</i></p> <p>Svitlana Kolosok, Tetiana Vasylieva and Serhiy Lyeonov <i>Machine Analysis of the UK Electrical Energy Initiatives Based on the E-petitions to the UK Government and Parliament</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Andrii Berko, Myroslava Bublyk, Lyubomyr Chyrun, Yurii Matseliukh, Roman Levus, Valentyna Panasyuk, Oksana Brodyak, Lyudmyla Dzyubyk and Olga Garbich-Moshora <i>Models and Methods for E-commerce Systems Designing in the Global Economy Development Conditions based on Mealy and Moore Machines</i></p> <p>Myroslava Bublyk and Yurii Matseliukh <i>Small-batteries Utilization Analysis Based on Mathematical Statistics Methods in Challenges of Circular Economy</i></p> <p>Lyubomyr Chyrun <i>The E-commerce Systems Modelling Based on Petri Networks</i></p> <p>Andrii Berko, Vasyl Andrunyk, Lyubomyr Chyrun, Mykhailo Sorokovsky, Oksana Oborska, Oksana Oryshchyn, Mykhailo Luchkevych and Oksana Brodovska <i>The Content Analysis Method for the Information Resources Formation in Electronic Content Commerce Systems</i></p> <p>Anatolii Vysotskyi, Volodymyr Kuchkovskiy, Vasyl Andrunyk, Maksym Krylyshyn, Lyubomyr Chyrun, Nataliia Sokulska and Ilona Brodovska <i>Application of Online Marketing Methods and SEO Technologies for Web Resources Analysis within the Region</i></p>
<b>13.00 – 16.30</b>	
<b>Session 6. Machine Learning Applications</b>	
<b>Session Chairs: Vasyl Lytvyn, Dmytro Dosyn and Tetiana Shestakevych</b>	
Join Zoom meeting	
<a href="https://us02web.zoom.us/j/87590417073?pwd=REM3THB3M1VqdVowVW1HM2ErTjhSZz09">https://us02web.zoom.us/j/87590417073?pwd=REM3THB3M1VqdVowVW1HM2ErTjhSZz09</a>	
Meeting ID: 875 9041 7073	
Password: 99kFz5	
13.00 – 13.40	<p>Yuriy Zaychenko and Galib Hamidov <i>Hybrid Neo-Fuzzy Neural Networks Based On Self-Organization and their Application for Forecasting in Financial Sphere</i></p>

	<p>Oleg Rudenko and Oleksandr Bezsonov <i>Robust Training of ADALINA Based on the Criterion of the Maximum Correntropy in the Presence of Outliers and Correlated Noise</i></p> <p>Sayan Roy, Binoy Sasmal <i>Integration Hierarchical Clustering Method and Dendrogram Method with Expectation Maximization for Identification of the Best Player Cluster</i></p> <p>Mahmoud Smaida, Serhii Yaroshchak and Youness El Barg <i>DCGAN for Enhancing Eye Diseases Classification</i></p>
	<b>Coffee break</b>
13.50 – 14.30	<p>Anatoliy Dovbysh, Vladyslav Piatachenko <i>Hierarchical Clustering Approach for Information-extreme Machine Learning of Hand Brush Prosthesis</i></p> <p>Anatolii Kargin and Tetyana Petrenko <i>Planning and Control Method Based on Fuzzy Logic for Intelligent Machine</i></p> <p>Igor Baklan, Alina Oliinyk, Iryna Mukha, Kateryna Lishchuk, Olena Gavrilenko, Svitlana Reutska, Anna Tsytsyliuk and Yurii Oliinyk <i>ECG Signal Processing Based on Linguistic Chain Fuzzy Sets</i></p> <p>Eugene Fedorov and Olga Nechyporenko <i>Dynamic Stock Buffer Management Method Based on Linguistic Constructions</i></p> <p>Serhii Tsyurulnyk, Volodymyr Tromsyuk, Valentyna Vernygora, Yaroslav Borodai <i>Simulation of Logic Elements in Reverse Mode for Building Neural Networks</i></p>
	<b>Lunch</b>
15.00 – 15.40	<p>Lyudmyla Kirichenko, Tamara Radivilova and Juliia Stepanenko <i>Applying Recurrence Plots to Classify Time Series</i></p> <p>Anton Senko, Andrey Kupin and Yuriy Osadchuk <i>Development of Indirect Determination Model Based on Neural Networks for the Process of Iron Ore Beneficiation</i></p> <p>Lidia Moskvych, Yuliia Riepina and Kostyantyn Shcherbinin <i>Application of Innovative Approaches to Video Segmentation in a Criminal Process</i></p> <p>Ganna Khoroshun <i>The Fuzzy Logic for Machine Vision System Effectiveness Assessment</i></p> <p>Oleksandr Drozd, Kostiantyn Zashcholkin, Maciej Dobrowolski, Anatoliy Sachenko, Oleksandr Martynyuk, Olena Ivanova and Julia Drozd <i>Evaluating real Checkability for FPGA-based Components of Safety-related Systems</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Hrystyna Lipyana-Goncharenko, Anatoliy Sachenko, Taras Lendyuk, Pavlo Bykovyy and Diana Zahorodnia <i>Method of Forming a Training Sample for Segmentation of Tender Organizers on Machine Learning Basis</i></p>

	<p>Nataliya Boyko and Rostyslav Hlynka <i>Application of Machine Algorithms for Classification and Formation of the Optimal Plan</i></p> <p>Nataliya Boyko, Solomiya Hetman, Iryna Kots <i>Comparison of Clustering Algorithms for Revenue and Cost Analysis</i></p> <p>Nataliya Boyko, Petro Telishevskiy, Beata Kushka <i>Analysis of Accuracy Measures for the Task of Classification in the Recommendation Systems</i></p> <p>Lyubomyr Chyrun, Vasyl Andrunyk, Liliya Chyrun, Aleksandr Gozhyj, Anatolii Vysotskyi, Oksana Tereshchuk, Nadiya Shykh, and Vadim Schuchmann <i>The Electronic Digests Formation and Categorization for Textual Commercial Content</i></p>
<p><b>13.00 – 16.30</b></p> <p><b>Session 7. Discourse Analysis and Social Media</b></p> <p><b>Session Chairs: Olena Levchenko and Nataliia Hrytsiv</b></p>	
<p><b>Join Zoom meeting:</b></p> <p><b><a href="https://zoom.us/j/98529930323?pwd=Z254T2Z6c1VMZUhlb1hobm04bG9udz09">https://zoom.us/j/98529930323?pwd=Z254T2Z6c1VMZUhlb1hobm04bG9udz09</a></b></p> <p><b>Meeting ID: 985 2993 0323</b></p> <p><b>Password: 289599</b></p>	
13.00 – 13.40	<p>Nataliya Vnukova, Svitlana Achkasova, Oleksii Gorokhovatskyi and Hanna Pysarevska <i>Decomposition of Google Trends Series for the Search of Patterns and Seasonality of Financial Risk Control Interest</i></p> <p>O. S. Kushnir, L. B. Ivanitskyi, A. I. Kashuba, M. R. Mostova and V. B. Mykhaylyk <i>Repetition Characteristic for Single Texts</i></p> <p>Antonina Badan and Nataliia Onishchenko <i>Multimedia Technologies in Foreign Language Learning under Pandemic</i></p> <p>Tetiana Shestakevych <i>Modeling the Process of Analysis of Statistical Characteristics of Student Digital Text</i></p> <p>Nataliia Hrytsiv, Tetiana Shestakevych and Juliia Shyyka <i>Quantitative Parameters of Lucy Montgomery's Literary Style</i></p>
<p><b>Coffee break</b></p>	
13.50 – 14.30	<p>Ivan Bekhta and Nataliia Hrytsiv <i>Computational Linguistics Tools in Mapping Emotional Dislocation of Translated Fiction</i></p> <p>Ivan Bekhta, Nataliia Hrytsiv and Anastasiia Matviichuk <i>Marking up Dramatic Text: a Case Study of "7 Stories" by Morris Panych</i></p> <p>Nataliia Romanyshyn <i>Algorithm for Disclosing Artistic Concepts in the Correlation of Explicitness and Implicitness of their Textual Manifestation</i></p>

	<p>Liubov Stasiuk <i>Gender Marked Intimate Conversational Interaction of Spouses in Modern English</i></p> <p>Olena Yurchenko and Nataliia Ugolnikova <i>Linguistic Methods in Social Media Marketing</i></p>
	<b>Lunch</b>
15.00 – 15.40	<p>Zoriana Haladzhun, Olha Harmatiy, Yuriy Bidzilya, Natalia Kunanets, and Khrystyna Shunevych <i>Hate Speech in Media Towards the Representatives of Roma Ethnic Community</i></p> <p>Solomiia Albota <i>Linguistically Manipulative, Disputable, Semantic Nature of the Community Reddit Feed Post</i></p> <p>Oleksandr Markovets, Solomiia Albota and Oksana Horpyniuk <i>Information Consolidation on Users of Social Networks to Determine their Credibility</i></p> <p>Nataliya Bondarchuk, Ivan Bekhta <i>Quantitative Characteristics of Lexical-semantic Groups Representing Weather in Weather News Stories (based on British Online Press)</i></p>
	<b>Coffee break</b>
15.50 – 16.30	<p>Svitlana Popereshnyak, Iryna Yurchuk <i>Social Networks: Analysis, Algorithms and their Implementation</i></p> <p>Nataliia Liubchenko, Andrii Podorozhniak, and Vasyl Oliinyk <i>Research of Antispam Bot Algorithms for Social Networks</i></p> <p>Viktor Shynkarenko and Inna Demidovich <i>Authorship Determination of Natural Language Texts by Several Classes of Indicators with Customizable Weights</i></p> <p>Olha Kulyna <i>Anthropocentrism as Implimention of a Testator/Testatrix's Communicative Goal</i></p> <p>Mariana Zhuravel and Yurii Lavriv <i>Methodology for Analysis of Intertextuality: Technical Aspect</i></p>
<p><b>13.00 – 15.20</b></p> <p><b>Student Session</b></p> <p><b>Session Chairs: Svitlana Petrasova and Natalia Borysova</b></p>	
<p><b>Join Zoom meeting:</b></p> <p><b><a href="https://us04web.zoom.us/j/5716961136?pwd=K2tRQUJpa3RUU1lkY0VFNIBxb3J3dz09">https://us04web.zoom.us/j/5716961136?pwd=K2tRQUJpa3RUU1lkY0VFNIBxb3J3dz09</a></b></p> <p><b>Meeting ID: 571 696 1136</b></p> <p><b>Password: 333333</b></p>	
13.00 – 13.40	<p>Vitalii Karasov, Olena Levchenko <i>An Algorithm of Automated Identification of the Noun “Думка” + Verb and Verb + Noun “Думка” Metaphorical Model Meaning (Based on the Novel Музеї покинутих секретів Written by Oksana Zabuzhko)</i></p>

	<p>Maria Razno, Nina Khairova <i>Media Discourse Analysis Based on Ukrainian Spoken and Written Corpus</i></p> <p>Uliana Romanova, Svitlana Petrasova <i>An Approach to Extraction of Verb-Noun Patterns from News Data Stream</i></p> <p>Anastasiia Shapovalova, Svitlana Petrasova <i>Linguistic Features of Designing Open-ended Test Systems</i></p>
	<b>Coffee break</b>
13.50 – 14.30	<p>Anna Shleiko, Natalia Borysova, Zoia Kochuieva, Karina Melnyk <i>An Overview of Existing Machine Learning Methods for Gender Classification of Names</i></p> <p>Yaroslav Tarasenko, Svitlana Petrasova <i>Unsupervised Open Relation Extraction</i></p> <p>Daria Budko, Nataliia Sharonova <i>Research of Information Retrieval Data Processing in Commercial Electronic Resources</i></p> <p>Oleksandr Bieliaiev, Yuliia Selivorstova and Irina Liutenko <i>Problems of Evaluating Frameworks for Web Applications</i></p>
	<b>Coffee break</b>
14.40 – 15.20	<p>Maiia Holshtein, Nadiia Babkova <i>The Approach to Creating the Recommendation System of Piano Pieces</i></p> <p>Anastasiia Khluieva, Zoia Kochuieva, Natalia Borysova <i>Implementation of the Removing Homonymy by Collocation System</i></p> <p>Vladyslav Khrantsov, Olena Orobinska <i>Special Aspects of Translation of Medical Instructions</i></p> <p>Valeriia Didushok, Nina Khairova <i>Linguistic Characteristics of Combat Post-traumatic Stress Disorder in a Trauma Related Narrative: Computational Context-aware Approach</i></p>
<b>17.00 – 17.40</b>	
<b>Conference Closing</b>	
<b>Session Chairs: Nataliia Sharonova, Yevhen Kupriianov</b>	
<b>Zoom meeting:</b> <a href="https://us02web.zoom.us/j/85366465839?pwd=K05OdmpwT1FvWmY4VDVMT3VHanh2Zz09">https://us02web.zoom.us/j/85366465839?pwd=K05OdmpwT1FvWmY4VDVMT3VHanh2Zz09</a> <b>Conference ID: 853 6646 5839</b> <b>Password: 4uznWN</b>	
	<p>Prof. Nataliia Sharonova <i>National Technical University “Kharkiv Polytechnic Institute”</i></p>

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Hours: 10:00 – 16:00