

2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

Conference Programme

Tuesday, August 21, 2018

8 ³⁰ to 18 ³⁰	Registration (Reception, «Pivdennij-EXPO», Lviv)
10 ³⁰ to 11 ³⁰	Opening (Conference Hall, «Pivdennij-EXPO», Lviv) Yuriy Rashkevych , Dr.Sc., Prof. (Ministry of Education and Science of Ukraine, Kyiv, Ukraine) Fast learning algorithm for GMDH-SVM deep neural network in Data Stream Mining tasks Viktor Voloshyn , Ph.D., Ass. Prof. (IT Step University, Lviv, Ukraine) Data Science. IT Education. R&D. Welcome speech Yaroslav Lyubinets , Ph.D. (Chairman of SoftServe, Lviv, Ukraine) Research & Development. Science. Connection. Welcome speech Andriy Moskalenko , Deputy Mayor (Lviv City Council, Lviv, Ukraine) Smart City. Science. Evolution. Welcome speech Yaroslav Prytula , Ph.D., Ass. Prof. (Ukrainian Catholic University, Lviv, Ukraine) Changing the World with Data Science. Welcome speech Ievgen Pichkalov , Chairperson, Executive Director (IEEE Ukraine Section) IEEE in Ukraine: Growing step by step. Welcome Speech
11 ³⁰ to 12 ⁰⁰	Coffee-break (Food Zone, «Pivdennij-EXPO», Lviv)
12 ⁰⁰ to 13 ³⁰	Plenary Session #1 (Conference Hall, «Pivdennij-EXPO», Lviv) Yevgeniy Bodyanskiy , Dr.Sc., Prof. (Kharkiv National University of Radio Electronics, Ukraine) Neuro-Fuzzy Stacked Autoencoder for Deep Neural Network and its Online Learning Igor Aizenberg , Dr.Sc., Prof. (Manhattan College, USA) Complex-Valued Neural Networks: New Trends and Applications
13 ³⁰ to 14 ³⁰	Lunch (Cafe, «Pivdennij-EXPO», Lviv)
14 ³⁰ to 16 ⁰⁰	Plenary Session #2 (Conference Hall, «Pivdennij-EXPO», Lviv)

– Topics

- 1 – Big Data & Data Science Using Intelligent Approaches
- 2 – Dynamic Data Mining & Data Stream Mining
- 3 – Hybrid Systems of Computational Intelligence
- 4 – Machine Vision and Pattern Recognition



2018 IEEE Second International Conference on Data Stream Mining & Processing (DSMP)

Martin Štěpnick, Ph.D., Ass.Prof.

(Institute for Research and Applications of Fuzzy Modeling Ostrava,
Czech Republic)

**Fuzzy relational compositions, their extensions and their application
to classification tasks**

Vitaliy Boyun, Dr.Sc., Prof.

(V. Glushkov Institute of Cybernetics of the National Academy
of Sciences of Ukraine, Kyiv, Ukraine)

**Bioinspired Approaches to the Selection and Processing of Video
Information**

16⁰⁰ to 16³⁰

Coffee-break (Food Zone, «Pivdennij-EXPO», Lviv)

16³⁰ to 18⁰⁰

Plenary Session #3 (Conference Hall, «Pivdennij-EXPO», Lviv)

Leonid Lyubchyk, Dr.Sc., Prof.

(National Technical University «Kharkiv Polytechnic Institute»,
Ukraine)

Online Ranking Learning on Clusters

Vyacheslav Kharchenko, Dr.Sc., Prof.

(National Aerospace University «Kharkiv Aviation Institute», Centre
for Safety Infrastructure-Oriented Research and Analysis, Research
and Production Company Radyi, Ukraine)

Critical Computing and Big Data: Challenges and Solutions

18⁰⁰ to 19⁰⁰

Transfer & Accommodation

(Reception, Recreation Complex «Kryve Ozero»,
Novoiavorivsk, Lviv Region)

19⁰⁰ to 20⁰⁰

Dinner (Restaurant, Recreation Complex «Kryve Ozero», Novoiavorivsk)

21⁰⁰ to 22⁰⁰

The Program Committee Meeting

Wednesday, August 22, 2018

8³⁰ to 9³⁰

Breakfast

9³⁰ to 11⁰⁰

Plenary Session #4 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Andrew Smith, Ph.D., Ass. Prof.

(University College Dublin, Ireland)

Technology and Internal Models for Financial Businesses

– Topics

- 1 – Big Data & Data Science Using Intelligent Approaches
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Volodymyr Mashtalir, Dr.Sc., Prof.
(Kharkiv National University of Radio Electronics, Ukraine)
Representative based Clustering of Long Multivariate Sequences with Different Lengths

Abdullah Sheneamer, Ph.D., Ass. Prof.
(Jazan University, Jazan, Saudi Arabia)
A Detection Framework for Semantic Code Clones and Obfuscated Code

9³⁰ to 11⁰⁰

Panel #1 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoivoriivsk, Lviv Region)

Andy Bosyi
(Founder and CEO MindCraft.ai, Ukraine)
Decision-Making Systems Based on Time Series

Elena Yegorova, Ph.D.
(Co-founder, CTO, LMX London, United Kingdom)
Data Processing for Behaviour Pattern Extraction: Applied Problems

Oleg Novosad
(CEO at Severenity; Senior Mobile Engineer, SoftServe;
Lecturer at IT State University)

Location-based procedural generation of augmented reality portals

11⁰⁰ to 11³⁰

Coffee-break

11³⁰ to 13⁰⁰

Plenary Session #5 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoivoriivsk, Lviv Region)

Mike Hinchey, Ph.D., Prof., Emeritus Director
(President, International Federation for Information Processing (IFIP);
Professor of Software Engineering, University of Limerick; Emeritus
Director, Lero-the Irish Software Research Centre; Chair, IEEE UK &
Ireland section)

Building Resilient Space Exploration Missions

Sergii Babichev, Ph.D, Ass. Prof.
(Jan Evangelista Purkyně University in Usti nad Labem, Czech Republic)

**Information Technology of Gene Expression Profiles Processing for
Purpose of Gene Regulatory Networks Reconstruction**

Bohdan Pavlyshenko, Ph.D., Ass. Prof.
(Data Scientist at SoftServe; Lviv National University, Ukraine)

Modern Approaches in Sales Predictive Analytics

– Topics

- 1 – Big Data & Data Science Using Intelligent Approaches
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2018 IEEE Second International Conference on Data Stream Mining & Processing (DSMP)

11³⁰ to 13⁰⁰

Panel #2 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Bohdan Kolchygin, Ph.D.
(Machine Learning Engineer, AltexSoft)

Under Construction: How to Debug Machine Learning Process

Denis Fragkakis Ph.D.
(Lead Data Scientist at Nested; Head of Data Science at LMX,
United Kingdom)

Data Processing for Reinforcement Learning: Advantages and Future

Artem Nikulchenko, Ph.D.
(Chief Software Architect, Clearwater, FL, USA)

Using Google Cloud Platform Tools for Big Data Processing and Analyze

13⁰⁰ to 14⁰⁰

Lunch (Restaurant, Recreation Complex «Kryve Ozero», Novoiavorivsk)

14⁰⁰ to 16⁰⁰

Panel #3 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Dmytro Liaskovsky
(Software Engineering Manager, Epam)

DLab - essential toolset for analytics

Oleksandr Slipchenko, Ph.D.
(Team Lead at Booking.com BV; Data Analyst at Teragence,
Netherlands)

**Teragence - Understand the Performance and Customer Experience
of a Mobile Network**

Alex Gostev
(Product Portfolio Manager, Diligences Inc.)
Source Code Metrics Quantification and Analysis Personalized

Vlad Vanzha
(Lead Engineer at Exponential Inc.)
Machine Learning Techniques in Advertisement.

14⁰⁰ to 16⁰⁰

Panel #4 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Volodymyr Lyubinets
(Software Engineer at Forethought, San Francisco, United States)
**Automated Triaging of Bugs and Tickets using Attention-based
Mechanisms in RNNs**

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Yehor Lyebyedyev

(Data Scientist at Perfectial)

Analysis of Data Streams from Social Networks

Ievgen Gorovyi, Ph.D.,

(CEO, It-Jim)

**Custom Augmented Reality SDK: Concepts, Technical Solutions
and Deployment to Mobile Platforms**

Semen Oskerko

(Student of IT STEP University, Ukraine)

**Hybrid Multidimensional Wavelet-Neuro-System and its Learning
in Pattern Recognition for IoT Application**

16⁰⁰ to 16³⁰

Coffee-break

16³⁰ to 18⁰⁰

Panel #5 (Conference Hall 1,

Recreation Complex «Kryve Ozero», Novoivoriivsk, Lviv Region)

Tetiana Gladkykh, Ph.D.

(Competence Manager, Data Science Group, SoftServe)

Music Content Selection Automation

Igor Manzhos, Ph.D.

(Data Science Engineer, Consultant, GlobalLogic)

**Using deep convolutional neural networks for medical
diagnostics**

Igor Mishchenko

(Data Science Engineer, Senior, GlobalLogic)

Medical data normalization with recurrent neural networks

16³⁰ to 18⁰⁰

Panel #6 (Conference Hall 2,

Recreation Complex «Kryve Ozero», Novoivoriivsk, Lviv Region)

Oleg Voloshko, Ph.D.

(Head of Big Data products at Kyivstar)

Machine learning algorithms in solving telecom operator issues

Iryna Zaytseva

(Project Manager, uData School, Kyiv, Ukraine)

**Ukrainian education and data science business:
are there any touch points?**

Igor Vlasov, Ph.D.

(Compliance Manager, Fintech United Group)

Blockchain & Society

– Topics

1 – Big Data & Data Science Using Intelligent Approaches

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2018 IEEE Second International Conference on Data Stream Mining & Processing (DSMP)

18⁰⁰ to 18³⁰

Topic #1 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

**Ganna Ponomaryova, Igor Nevlydov, Oleksandr Filipenko
and Mariya Volkova**

**MEMS-based Inertial sensor signals and machine learning methods
for classifying robot motion**

**Iryna Perova, Olena Litovchenko, Yevgeniy Bodyanskiy,
Yelizaveta Brazhnykova, Igor Zavgorodnii and Pavlo Mulesa**

**Medical Data-Stream Mining in the Area of Electromagnetic
Radiation and Low Temperature Influence on Biological Objects**

**Polina Zhernova, Anastasiia Deineko, Yevgeniy Bodyanskiy
and Vladyslav Riepin**

**Adaptive Kernel Data Streams Clustering Based on Neural Networks
Ensembles in Conditions of Uncertainty About Amount and Shapes
of Clusters**

18⁰⁰ to 18³⁰

Topic #2 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

**Kirill Smelyakov, Dmytro Yeremenko, Vitalii Polezhai,
Anton Sakhon and Anastasiya Chupryna**

Braille character recognition based on neural networks

**Gennady Chuiko, Olga Dvornik and Yevhen Darnapuk
Shape evolutions of Poincaré Plots for electromyograms
in data acquisition dynamics**

Petro Kravets

Game Model for Data Stream Clustering

18³⁰ to 19³⁰

Plenary Session #6 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Dmytro Uzlov, Dr.Sc., Prof.

(National Police of Ukraine in Kharkiv region, Ukraine)

Using Data Mining for Intelligence Led Policing and Criminal Analysis

Volodymyr Stepashko, Dr.Sc., Prof.

(IRTC for Information Technologies and Systems)

**Inductive Modeling in the Context of Computational Intelligence
Approaches**

19³⁰ to 20³⁰

Dinner (Restaurant, Recreation Complex «Kryve Ozero», Novoiavorivsk)

20³⁰ to 21³⁰

Event

– Topics

1 – Big Data & Data Science Using Intelligent Approaches

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2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

Thursday, August 23, 2018

8³⁰ to 9³⁰

9³⁰ to 11⁰⁰

Breakfast

Topic #3 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Sergej Korjagin, Pavel Klachek and Irina Liberman
**Development of Hybrid Computational Intelligence by Knowledge
Genesis Method**

Igor Aizenberg and Kashifuddin Qazi
**Cloud Datacenter Workload Prediction using Complex-valued
Neural Networks**

Yegor Kovylin and Oleg Volkovsky
**Computer system of building of the semantic model
of the document information on submission**

**Alina Shafronenko, Yevgeniy Bodyanskiy, Artem Dolotov
and Galina Setlak**
**Fuzzy Clustering of Distorted Observations Based On Optimal
Expansion Using Partial Distances**

Nataliia Kashpruk, Anna Walaszek-Babiszewska and Marek Rydel
**On the Equivalence between AR Family Time Series Models
and Fuzzy Models in Signal Processing**

**Sergii Babichev, Volodymyr Lytvynenko, Maxim Korobchynskiy,
Jiří Škvor and Maria Voronenko**
**Information Technology of Gene Expression Profiles Processing
for Purpose of Gene Regulatory Networks Reconstruction**

Ali Rekik and Nissen Masmoudi
**A New Approach for Forming a Probabilistic Risk Assessment Model
of Innovative Project Implementation Under Risk**

**Viktor Morozov, Olena Kalnichenko, Andrii Khrutba,
Grigory Steshenko and Iuliia Liubyma**
**Managing of Change Streams in Projects of Development
Distributed Information System**

**Alexander Vlasenko, Olena Vynokurova, Nataliia Vlasenko
and Marta Peleshko**
**A Hybrid Neuro-Fuzzy Model for Stock Market Time-Series
Prediction**

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2018 IEEE Second International Conference on
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9³⁰ to 11⁰⁰

Vladyslav Kotsovsky, Fedir Geche and Anatoliy Batyuk
Finite Generalization of the Offline Spectral Learning

Topic #4 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Dmytro Peleshko, Oleksii Maksymiv, Taras Rak, Orysia Voloshyn
and Bohdan Morklianyk

Core Generator of Hypotheses for Real-Time Flame Detecting

Oleksii Gorokhovatskyi and Olena Peredrii

Shallow Convolutional Neural Networks for Pattern Recognition
Problems

Volodymyr Gorokhovatskyi, Yevgenyi Putyatin,

Oleksii Gorokhovatskyi and Olena Peredrii

Quantization of the Space of Structural Image Features as a Way
to Increase Recognition Performance

Ali Al-Ammouri, Hasan Al-Ammori, Arsen Klochan
and Anastasia Degtiarova

Logic-Mathematical Model for Recognition the Dangerous Flight
Events

Yevgeniy Bodyanskiy, Nonna Kulishova
and Daria Malysheva

The Multidimensional Extended Neo-Fuzzy System and its Fast
Learning for Emotions Online Recognition

Nataliya Boyko, Nataliya Shakhovska and Oleg Basystiuk
Performance Evaluation and Comparison of Software for Face
Recognition, Based on Dlib and Opencv Library

Andriy Klyuvak, Oksana Kliuvak and Ruslan Skrynkovskyy
Partial Motion Blur Removal

Sergei Yelmanov and Yuriy Romanyshyn

A Generalized Description for the Perceived Contrast of Image
Elements

Maksym Korobchynskiy, Alexander Mariliv, Mihail Slonov
and Serhii Mieshkov

Method for Determining the Rational Time Intervals for Detecting
Objects by Thermal Imager

11⁰⁰ to 11³⁰

Coffee-break

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2018 IEEE Second International Conference on Data Stream Mining & Processing (DSMP)

11³⁰ to 13⁰⁰

Topic #1 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoavorivsk, Lviv Region)

Dmytro Lande, Valentyna Andrushchenko and Iryna Balagura
Data science in open-access research on-line resources

**Nina Khairova, Svitlana Petrasova
and Włodzimierz Lewoniewski**
**Building the Semantic Similarity Model for Social Network Data
Streams**

Gautam Pal, Gangmin Li and Katie Atkinson
Big Data Real Time Ingestion and Machine Learning

Andrii Berko and Vladyslav Alieksieiev
A method to solve uncertainty problem for Big Data sources

Yuriy Kondratenko and Nina Kondratenko
**Computational Library of the Direct Analytic Models for Real-Time
Fuzzy Information Processing**

**Oleksandr Gerasin, Yuriy Zaporozhets
and Yuriy Kondratenko**
**Models of Magnetic Driver Interaction with Ferromagnetic Surface
and Geometric Data Computing for Clamping Force Localization
Patches**

Volodymyr Ostakhov, Viktor Morozov and Nadiia Artykulna
Models of IT Projects KPIs and Metrics

Yuliya Kozina, Natalya Volkova and Daniil Horpenko
Mobile Application For Decision Support In Multi-Criteria Problems

11³⁰ to 13⁰⁰

Topic #2 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoavorivsk, Lviv Region)

Vasyl Lytvyn, Victoria Vysotska, Yevhen Burov and Andriy Demchuk
**Defining Author's Style for Plagiarism detection in Academic
Environment**

Volodymyr Yuzevych, Ruslan Skrynkovskyy and Bohdan Koman
**Intelligent Analysis of Data Systems for Defects in Underground Gas
Pipeline**

Liliya Chyrun, Iaroslav Kis, Victoria Vysotska and Lyubomyr Chyrun
**Content Analysis Method for Cut Formation of Human Psychological
State**

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2018 IEEE Second International Conference on
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Vasyl Lytvyn, Victoria Vysotska, Olga Lozynska, Oksana Oborska
and Dmytro Dosyn

**Methods of Building Intelligent Decision Support Systems Based
on Adaptive Ontology**

Fedir Geche, Oksana Mulesa, Veronika Voloshchuk
and Anatoliy Batyuk

**About Kernel Structure Construction of the Generalized Neural
Functions**

Olga Smotr, Nazarii Burak, Yuriy Borzov and Solomija Ljaskovska
**Implementation of Information Technologies in the organization
of Forest Fire Suppression Process**

Oleg Riznyk, Olexandr Povshuk, Yurii Kynash and Yurii Noga
Transformation of Information Based on Noisy Codes

Serhii Rybalchenko

**Big Data Automatic System of Analysis and Trading
on Financial Markets**

Anna Vergeles, Dmytro Prokopenko, Alexander Khaya
and Nataliia Manakova

**Unsupervised Real-Time Stream-Based Novelty Detection
Technique**

Anastasiia Deineko, Polina Zhernova, Boris Gordon,
Oleksandr Zayika, Iryna Pliss and Nelya Pabyrivska
**Data Stream Online Clustering Based on Fuzzy Expectation-
Maximization Approach** information on submission

Mesbaholdin Salami, Farzad Movahedi Sobhani
and Mohammad Sadegh Ghazizadeh

**Development of a New Algorithm Based on Simulation –
Optimization Algorithms for Big Data Mining to Improve Prediction
of Future Electricity Prices in the Iranian Electricity Market**

Solomija Ljaskovska, Igor Malets, Yevgen Martyn
and Oleksandr Prydatko

**Information Technology of Process Modeling in the Multiparameter
Systems**

13⁰⁰ to 14⁰⁰

Lunch (Restaurant,
Recreation Complex «Kryve Ozero», Novoiavorivsk)

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2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

14⁰⁰ to 16⁰⁰

Topic #3 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Nelya Pabyrivska and Viktor Pabyrivskyy
**Inverse Problem for Two-Dimensional Heat Equation
With an Unknown Source**

Yuliia Tatarinova
**AVIA: Automatic Vulnerability Impact Assessment
on the target system**

**Olena Vynokurova, Dmytro Peleshko, Viktor Voloshyn,
Semen Oskerko and Yuriy Borzov**
**Hybrid Multidimensional Wavelet-Neuro-System and its Learning
Using Cross Entropy Cost Function for Patterns Recognition**

Olexiy Azarov, Leonid Krupelnitsky and Hanna Rakytyanska
**A Fuzzy Model of Television Rating Control with Trend Rules
Tuning based on Monitoring Results**

**Yaroslav Sokolovskyy, Maryana Levkovich, Olha Mokrytska
and Vitalij Atamanyuk**
**Mathematical modeling of two-dimensional deformation-relaxation
processes in environments with fractal structure**

Shashi Bhushan, Raju Pal and Svetlana G Antoshchuk
**Energy Efficient Clustering Protocol for Heterogeneous Wireless
Sensor Network: A Hybrid Approach using GA and K-means**

**Pavlo Vitynskyi, Roman Tkachenko, Ivan Izonin
and Hakan Kutucu**
**Hybridization of the SGTm Neural-like Structure through Inputs
Polynomial Extension**

Igor Aizenberg and Zain Khaliq
Analysis of EEG using MLMVN

Galyna Chornous and Ihor Nikolskyi
**Business-Oriented Feature Selection for Hybrid Classification Model
of Credit Scoring**

Zhengbing Hu and Oleksii Tyshchenko
**A Hybrid Neuro-Fuzzy Element: a New Structural Node for Evolving
Neuro-Fuzzy Systems**

**Kostyantyn Kharchenko, Oleksandr Beznosyk
and Valeriy Romanov**

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2018 IEEE Second International Conference on Data Stream Mining & Processing (DSMP)

14⁰⁰ to 16⁰⁰

Implementation of Neural Networks with help of a Data Flow Virtual Machine

**Viktor Mashkov, Jiří Fišer, Volodymyr Lytvynenko
and Maria Voronenko**

Self-diagnosis of the systems with intermittently faulty units

Topic #4 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Boyun Vitaliy

**Bioinspired approaches to the selection and processing
of video information**

**Vyacheslav Moskalenko, Alona Moskalenko,
Artem Korobov, Olha Boiko, Serhii Martynenko
and Oleksandr Borovenskyi**

**Model and training methods of autonomous navigation system
for compact drones**

**Olena Vynokurova, Yevgeniy Bodyanskiy, Dmytro Peleshko
and Yuriy Rashkevych**

**The Autoencoder Based on Generalized Neo-Fuzzy Neuron
and its Fast Learning for Deep Neural Networks**

**Sergey Rassomakhin, Alexandr Kuznetsov, Vladimir Shlokin
and Ivan Bilozetsev**

**Mathematical model for the probabilistic minutia distribution
in biometric fingerprint images**

**Yevgeniy Bodyanskiy, Iryna Pliss, Daria Kopaliani
and Olena Boiko**

Deep 2D-Neural Network and Its Fast Learning

**Andriy Yerokhin, Valerii Semenets, Alina Nechyporenko,
Oleksii Turuta and Andrii Babii**

F-transform 3D point cloud filtering algorithm

**Petr Hurtik, David Číž, Oto Kaláb, David Musiolek, Petr Kočárek
and Martin Tomis**

**Software for visual insect tracking based on F-transform
pattern matching**

**Ievgen Gorovyi, Vitalii Vovk, Maksim Shevchenko, Valerii Zozulia
and Dmytro Sharapov**

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Embedded Vision Modules for Text Recognition and Fiducial Markers Tracking

Roman Martsyshyn, Yulia Miyushkovych, Lubomyr Sikora, Natalya Lysa and Rostyslav Tkachuk

Technology of Remote Recognition the Dart-Arrow on the Target

Anatoliy Kovalchuk and Nataliia Lotoshynska

Elements of RSA algorithm and extra noising in a binary linear-quadratic transformations during encryption and decryption of images

Sergii Mashtalir, Volodymyr Mashtalir and Mykhailo Stolbovyi
Representative Based Clustering of Long Multivariate Sequences with Different Lengths

Sergii Mashtalir, Olena Mikhnova and Mykhailo Stolbovyi
Sequence Matching for Content-Based Video Retrieval

Coffee-break

Topic #2 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Gennadiy Churyumov, Vladimir Tokarev, Vitalii Tkachov and Stanislav Partyka

Scenario of Interaction of the Mobile Technical Objects in the Process of Transmission of Data Streams in Conditions of Impacting the Powerful Electromagnetic Field

Oleksandr Prydatko, Ivan Solotvinsky, Yuriy Borzov, Oleksii Didyk and Olga Smotr

Informational System of Project Management in the Areas of Regional Security Systems' Development

Leonid Lyubchuk and Galyna Grinberg
Online Ranking Learning on Clusters

Vitalii Bulakh, Lyudmyla Kirichenko and Tamara Radivilova
Time series classification based on fractal properties

Olga Zavgorodnia, Ivan Mikheev and Oleksandr Zyma
Identifying European e-learner profile by means of data mining

Galyna Kriukova and Mykola Glybovets

16⁰⁰ to 16³⁰

16³⁰ to 18³⁰

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High-performance Data Stream Mining by means of embedding Hidden Markov Model into Reproducing Kernel Hilbert Spaces

Daniel Ambach and Oleksandra Ambach

Forecasting the oil price with a periodic regression ARFIMA-GARCH process

Valentyna Volkova, Ivan Deriuga, Vadym Osadchyi and Olga Radyvonenko

Improvement of character segmentation using recurrent neural networks and dynamic programming

Sergiy Golub and Nataliia Khymytsia

The method of clodinamik monitoring

Sergii Khlamov, Vadym Savanevych, Olexander Briukhovetskyi, Artem Pohorelov, Vladimir Vlasenko and Eugen Dikov

COLiTec software for the astronomical data sets processing

Anastasiya Doroshenko

Piecewise-linear Approach to Classification based on Geometrical Transformation Model for Imbalanced dataset

Alexey Roenko, Feliks Sirenko, Yevhen Chervoniak and Ievgen Gorovyj

Data Processing Methods For Mobile Indoor Navigation

Topic #4 (Conference Hall 2,

Recreation Complex «Kryve Ozero», Novoiaivorivsk, Lviv Region)

Oleh Berezsky, Oleh Pitsun, Natalia Batryn, Kateryna Berezska, Nadiya Savka and Taras Dolynyuk

Image Segmentation Metric-Based Adaptive Method

Igor Malets, Oleksandr Prydatko, Vasyl Popovych and Andriy Dominik

Interactive Computer Simulators in Rescuer Training and Research of their Optimal Use Indicator

Roman Melnyk and Yurii Kalychak

Analysis of Metal Defects by Clustering the Sample and Distributed Cumulative Histogram

Sergei Yelmanov and Yuriy Romanyshyn

Image Contrast Enhancement Using a Modified Histogram Equalization

Yevhen Zadorozhnii, Yevhenii Tverdokhlib, Tetiana Fedoronchak and Natalia Myronova

16³⁰ to 18³⁰

– Topics

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2 – Dynamic Data Mining & Data Stream Mining

3 – Hybrid Systems of Computational Intelligence

4 – Machine Vision and Pattern Recognition



2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

Development and implementation of human face alignment and tracking in video streams

Mariya Nazarkevych, Ivanna Klyujnyk and Hanna Nazarkevych
Investigation the Ateb-Gabor filter in biometric security systems

Bohdan Durnyak, Oleksandr Tymchenko Jr., Oleksandr Tymchenko and Bohdana Havrysh

Applying the Neuronetchic Methodology to Text Images for Their Recognition

Volodymyr Sherstiuk, Marina Zharikova and Igor Sokol
Forest Fire Monitoring System Based on UAV team, Remote Sensing, and Image Processing

Yuriy Furgala, Yuriy Mochulsky and Bohdan Rusyn
Evaluation of Objects Recognition Efficiency on Mapes by Various Methods

Tetiana Gladkykh, Taras Hnot and Roman Grubnyk
Music content selection automation

Galyna Shcherbakova, Victor Krylov, Maksym Gerganov, Svitlana Antoshchuk and Marina Polyakova, Anatoly Sachenko
Areal Multistart Method of Optimization for Image Recognition

Maksym Kovalchuk, Vasyl Koval, Anatoliy Sachenko and Diana Zahorodnia

Development of Real-time Face Recognition System Using Local Binary Patterns

19⁰⁰ to 20⁰⁰

Dinner (Restaurant,
Recreation Complex «Kryve Ozero», Novoiavorivsk)

20⁰⁰ to 22⁰⁰

Event

Friday, August 24, 2018

8³⁰ to 9³⁰

Breakfast

9³⁰ to 10³⁰

Topic #1 (Conference Hall 1,
Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Olena Basalkevych and Olexandr Basalkevych
Fuzzy reconstructions in linguistics

– Topics

- 1 – Big Data & Data Science Using Intelligent Approaches
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2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

**Mykola Malyar, Oleksey Voloshyn, Volodymyr Polishchuk
and Marianna Sharkadi**

Fuzzy mathematical modeling financial risks

**Peter Bidyuk, Aleksandr Gozhyy, Iryna Kalinina, Zdislaw Szymanski
and Volodymyr Beglytsia**

**The Methods Bayesian Analysis of the Threshold Stochastic
Volatility Model**

Max Garkavtsev, Natalia Lamonova and Alexander Gostev
**Choosing a Programming Language for a New Project from a Code
Quality Perspective**

Viktor Putrenko, Nataliia Pashynska and Sergiy Nazarenko
**Data Mining of Network Events with Space-Time Cube
Application**

Vasyl Palchykov and Yuriy Holovatch

**Bipartite graph analysis as an alternative to reveal clusterization
in complex systems**

**Dariusz Puchala, Kamil Stokfiszewski, Kamil Wieloch
and Mykhaylo Yatsymirskyy**

**Comparative Study of Massively Parallel GPU Realizations of
Wavelet Transform Computation with Lattice Structure and Matrix-
Based Approach**

Vladyslav Alieksiev

**One approach of approximation for incoming data stream in IoT
based monitoring system**

**Anatoliy Batyuk, Volodymyr Voityshyn
and Volodymyr Verhun**

**Software Architecture Design of the Real-Time Processes
Monitoring Platform**

**Myroslav Komar, Vladimir Golovko, Anatoliy Sachenko,
Vitaliy Dorosh and Pavlo Yakobchuk**

**Deep Neural Network for Image Recognition Based on the Caffe
Framework**

Mansouri Sadek, Mbarek Charhad, Ali Rekik and Mounir Zrigui
**A Framework for Semantic Video Content Indexing using textual
Information**

9³⁰ to 11³⁰

Topic #3 (Conference Hall 2,
Recreation Complex «Kryve Ozero», Novoivoriivsk, Lviv Region)

– Topics

- 1 – Big Data & Data Science Using Intelligent Approaches
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2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

Dmytro Chumachenko

On intelligent multiagent approach to viral hepatitis B epidemic processes simulation

Sergii Kondratiuk and Iurii Krak

Dactyl Alphabet Modeling and Recognition Using Cross Platform Software

Lukasz Wieczorek and Przemyslaw Ignaciuk

Intelligent support for resource distribution in logistic networks using continuous-domain genetic algorithms

Ihor Shelevytsky, Victorya Shelevytska, Vlad Golovko and Bogdan Semenov

Segmentation and parametrization of the phonocardiogram for the heart conditions classification in newborns

Oleksandr Dumin, Dmytro Shyrokorad, Gennadiy Pochanin, Vadym Plakhtii and Oleksandr Prishchenko

Subsurface Object Identification by Artificial Neural Networks and Impulse Radiolocation

Ivan Tsmots, Oleksa Skorokhoda, Yurii Tsybmal, Taras Tesluyk and Viktor Khavalko

Neural-Like Means for Data Streams Encryption and Decryption in Real Time

Mykola Dyvak, Iryna Oliynyk, Andriy Pukas and Andriy Melnyk
Selection the "Saturated" Block from Interval System of Linear Algebraic Equations for Recurrent Laryngeal Nerve Identification

Paweł Tarasiuk and Mykhaylo Yatsymirskyy

Optimized Concise Implementation of Batcher's Odd-Even Sorting

Topic #2 (Conference Hall 1,

Recreation Complex «Kryve Ozero», Novoiavorivsk, Lviv Region)

Yurij Holovatch, Ralph Kenna and Olesya Mryglod

Data Mining in Scientometrics: usage analysis for academic publications

Hanna Rudakova, Oksana Polyvoda and Anton Omelchuk

Using Recurrent Procedures to Identify the Parameters of the Large-sized Object Moving Process Model in Real Time

Andriy Lozynskyy, Igor Romanyshyn, Bohdan Rusyn and Volodymyr Minialo

10³⁰ to 11³⁰

– Topics

1 – Big Data & Data Science Using Intelligent Approaches

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2018 IEEE Second International Conference on
Data Stream Mining & Processing (DSMP)

Robust Approach to Estimation of the Intensity of Noisy Signal with Additive Uncorrelated Impulse Interference

Bohdan Pavlyshenko

Using Stacking Approaches for Machine Learning Models

Romanna Malets, Igor Malets, Heorgiy Shynkarenko and Petro Vahin

Modeling of Thermoviscoelasticity Time Harmonic Variational Problem for a Thin Wall Body

Oleh Suprun, Olena Sipko and Vitaliy Snytyuk

Educational Schedule Development using Evolution Technologies

Volodymyr Lyubinets, Deon Nicholas and Taras Boiko

Automated labeling of bugs and tickets using attention-based mechanisms in recurrent neural networks

Yehor Lyebyedyev and Mykola Makhortykh

#Euromaidan: Quantitative analysis of multi-lingual framing of 2013-2014 Ukrainian protests on Twitter

11³⁰ to 12³⁰

Reserved

12³⁰ to 13³⁰

Lunch (Restaurant,
Recreation Complex «Kryve Ozero», Novoivavorivsk)

13³⁰ to 19⁰⁰

Independence Day Party (Lviv)

19³⁰ to 20⁰⁰

Closing Ceremony (Restaurant,
Recreation Complex «Kryve Ozero», Novoivavorivsk)

20⁰⁰ to 23³⁰

Conference Feast – Banquet (Restaurant,
Recreation Complex «Kryve Ozero», Novoivavorivsk)

Saturday, August 25, 2018

8³⁰ to 9³⁰

Breakfast

10⁰⁰ to 11⁰⁰

Transfer To Railway Station

– Topics

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