PROGRAM

17TH INTERNATIONAL CONFERENCE ON
PATTERN RECOGNITION AND INFORMATION PROCESSING
EMBEDDING THE FUTURE

#PRIP2025
16-18 SEPTEMBER MINSK

SCHEDULE
SESSION TALKS
LIGHTNING TALKS

17th International Conference on
Pattern Recognition and Information Processing

16 -18 September 2025 • hybrid

Minsk • UIIP NAS Belarus

In an era of rapid technological advancement, the motto "Embedding the Future" emphasizes advances in pattern recognition and information processing. The ability to convert unprocessed data into interpretable representations is referred to embeddings. As data multimodality becomes more common, breakthrough technologies enable machines to recognize and handle this information more efficiently than ever before.

This conference will dive into these novel themes in basic and applied research. We encourage top scientists and students to present how these technologies may be used to solve practical problems in a variety of domains, such as bioinformatics, autonomous systems, healthcare, and more.

We're going to explore how these incredible breakthroughs can not only supercharge our tech skills but also pave the way to a smarter, more connected world, benefiting society as a whole!

"Embedding the Future "

Web-site: https://prip.by/2025/
YouTube channel: https://www.youtube.com/@PRIPConference
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General **Partnership**

vebtech is a full cycle IT company and High-Tech Park resident (Eastern Europe's largest IT hub) delivering enterprise software and AI solutions for banks and fintech since 2018, with 300+ specialists and 130+ certifications built on 25+ years of domain experience within the team.

As PRIP 2025 General Partner, vebtech highlights VAIB — vebtech Artificial Intelligence bunch — the innovative AI laboratory, delivering solutions in Computer Vision, NLP/LLM, Speech Recognition and Data Science. Combined with vebtech's expertise they turn ideas into secure, scalable products for finance and enterprise.

InnoTech Solutions is a Minsk-based IT company founded in 2018, delivering customer-oriented software services. Its team combines young professionals with experienced experts holding advanced degrees.

The company provides a full development cycle, from analysis and design to implementation, support, and training.

InnoTech also focuses on R&D, AI solutions, IT consulting, and outsourcing. Serving industries such as healthcare, energy, transport, banking, and telecommunications, it ensures reliable and effective digital transformation.

Support and **Endorsement**

The National Academy of Sciences of Belarus

BASNET, National Research and Education Network

The Belarusian Association for Image Analysis and Recognition (BAIAR)

The Asia-Pacific Artificial Intelligence Association (AAIA)

The Information Fusion Subcommittee of the Chinese Society of Aeronautics and Astronautics (CSAA)

The Kaiyuan International Mathematical Sciences Institute (KIMSI)

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BezKassira.by, cloud-based ticketing platform

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Conference **Regulations**

The Conference will be held in a hybrid format, allowing participation both online and in-person. Presentation time allocations are as follows:

- **Session Talks** – 10 minutes for the presentation and 2 minutes for Q&A.
- **Flash Session** – 5 minutes for the presentation and 2 minutes for Q&A.
- **Lightning Talks** – 5 minutes for the presentation (no Q&A).

Please note that the time limit for Lightning Talks is strictly enforced: presentations exceeding 5 minutes will be terminated.

All speakers are required to familiarize themselves with the Conference schedule and their assigned presentation time.

- **Online speakers** must join during the *Get Connecting* slot prior to their session or during the scheduled break. They are expected to have a working microphone and camera. Upon receiving the floor from the moderator, the speaker should share their screen and deliver the presentation in their preferred format.
- **On-site speakers** must submit their presentation in advance to the technical specialist or moderator during the *Get Connecting* slot prior to their session or during the scheduled break.

NOTE: Operating time of the conference is MINSK TIME ZONE (GMT+3)

Conference **Sessions**

Plenary (P) – Plenary Session (keynotes).

Session Talks:

- **Track A** – Sessions and **Flash Sessions (F-A)** "Computer Vision and Video Analytics";
- **Track B** – Sessions and **Flash Sessions (F-B)** "Intelligent Systems, Data Analytics and Machine Learning".

Lightning Talks (L).

Privacy **Policy**

Acknowledge that you have completely read and fully understand the following!

PRIP'2025 Conference is organized by UIIP NASB and endorsed by BAIAR, AAIA, and CSAA, and so we wish to inform you about your rights regarding your personal data, which we ask you to share with us.

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We would also like to draw your attention that during the conference, a free live YouTube stream will be organized, as well as audio and video recording of all speeches. We will use materials on the conference website to provide the conference participants with relevant information and to promote the event via social media, newsletters, mailshots, magazine articles, and blogs. During PRIP2025 we could also collect your feedback, take screenshots of you to use for such purposes.

We take your privacy seriously and will only use your personal information, provided by you. We will keep this information available on the PRIP2025 website for an indefinite period for informational purposes. Your registration contact details will be added to our mailing list, which is only used for disseminating information about this conference.

Conference **Schedule**

Day 1- **Tuesday (September 16, 2025) / Minsk Time Zone (GMT+3)**

09:00-09:30	Get Connecting / Networking

09:30-09:50	**Opening**	• Prof. Alexander Tuzikov (UIIP NASB). *Conference Chairman* • Dr. Sergey Kruglikov (UIIP NASB). *Conference Vice-Chairman* • Acad. Prof. Sergey Ablameyko (BSU). *Conference Vice-Chairman* • *Distinguished guests*

09:50-11:00	Session Chairman: **Prof. Alexander Tuzikov (UIIP NASB, Belarus)**

09:55-10:25	**Plenary**	**P1.1** *Dmitry Chickrin* **Design Templates for Unmanned Ground Vehicles and ADAS Subsystems**
10:30-11:00		**P1.2** *Minglei Fu* **Intelligent inspection robot system driven by multimodal large model**

11:00-11:15	**Ceremony**	**DEDICATION CEREMONY FOR THE CHINA-BELARUS JOINT LABORATORY FOR EMBODIED ARTIFICIAL INTELLIGENT TECHNOLOGIES** *Distinguished guests and representatives of:* • The State Scientific Institution "The United Institute of Informatics Problems of the National Academy of Sciences of Belarus" (Belarus) • The State Scientific and Production Association "Optics, Optoelectronics and Laser Technology of the National Academy of Sciences of Belarus" (Belarus) • Faculty of Applied Mathematics and Informatics of Belarusian State University (Belarus) • Zhejiang University of Technology (China)

11:15-11:30	Morning **Coffee** (15 minutes)

11:30-13:00	Session Moderator: **Dr. Alexei Belotserkovsky (UIIP NASB, Belarus)**

11:30-11:45	**Lightning Talks L1**	**Lightning Talks Opening: "vebtech VAIB" presentation**
11:45-13:00 5 min slots		**#47 L1.1 (online)** *Xie YUhang, Zhenghao Cao, Sheng Xu* TCS: An algorithm for focusing on the segmentation of tree crowns and trunks in forest point clouds
		#51 L1.2 (online) *Leng Xiangguang, Ma Jun, Tsviatkou Viktar, Sirotko Sergey, Xiong Boli, Ji Kefeng* Time-Frequency Characteristics of Ships in Range-Compressed SAR Data
		#58 L1.3 (online) *Li Hao, Liu Chang* Efficient Sensor Selection Framework for Non-linear System Optimization
		#74 L1.4 *Shaladonova Marina, Usanov Sergey* Machine Learning Approach in Searching Novel Human Aromatase Inhibitors

	Lightning Talks L1	**#83 L1.5** *Smorodin Viktor, Prokhorenko Vladislav* Adaptive Control System Based on Deep Neural Networks
		#87 L1.6 *Qi Xiexing, Xiong Shuang, Liu Jiahan, Dang ZIfeng, Wang Nan* Data Processing in the Design of Pyramidal Horn Communication Terminal
		#90 L1.7 *Kabulov Timur* Deep Learning Methods for Multiple Sclerosis Lesions Segmentation on MRI data
		#96 L1.8 *Bintsarouski Leanid, Pirshtuk Dzianis* GPU-Only Neural Network Inference Using Fragment Shaders in OpenGL
		#99 L1.9 (online) *Markelov Vladimir* Development of a Multitasking Control System for Small Underwater Robotic Vehicles Based on STM32 and FreeRtos
		#109 L1.10 *Gao Yuhang, Ha Nasi* A-LightNet: A Lightweight YOLOv8n-Based Model for Aerial Small Object Detection
		#110 L1.11 (online) *Gustov Egor, Chickrin Dmitry* Structural and Circuit Design Aspects of Implementing a Two-Level Computational Control Unit for an Unmanned Vehicle
13:00-13:40	**Networking Lunch (40 minutes)**	
13:40-15:30	Session Chairman: Dr. Anton Egorchev (ICMIT, Tatarstan, Russia)	
13:40-13:52	**Session Talks S-A1**	**#146 S-A1.1** *Egorchev Anton, Derzhavin Dmitry, Chickrin Dmitry, Shabernev Gleb, Vafin Ilsaf* System of machine vision algorithms for detecting and eliminating speckle noise in ultrasound images using a convolutional neural network
13:52-14:04		**#61 S-A1.2** *Li Dongsheng, Yu Lian, Wang Guoyan, Fan Hongqi, Tsviatkou Viktar* Multi-Camera Pairwise Calibration Through Joint Optimization Method
14:04-14:16 (online)		**#76 S-A1.3** *Ihnatsyeva Sviatlana, Tamashevich Mikita, Bohush Rykhard* Open-World Person Re-identification Based on Face and Appearance Features
14:16-14:28 (online)		**#82 S-A1.4** *Kosarava Katsiaryna* Optimizing ECG Image Processing: A Multi-Method Approach to Signal Extraction and Recovery
14:28-14:40		**#89 S-A1.5** *Zhao Shuyi, Zhang Chi, Ma Jun* A SAR Ship Detection Method Enhanced by Receptive Field Attention
14:40-14:52		**#93 S-A1.6** *Wang Wenqi, Zhang Xu, Ma Jun* Sam-Yolov12: Lightweight Sar Ship Detection Via Speckle Attention

14:52-15:04	Session Talks **S-A1**	**#31 S-A1.7** *Li Bao, Sergey Ablameyko* Multimodal person emotion analysis system based on shared Transformer architecture
15:04-15:16		**#53 S-A1.8** *Kurachka Kanstantsin, Ren Huanhai, Wang Xuemei* Comparative Analysis of Deep Learning Models for Lumbar Vertebrae Segmentation in MRI Images
15:16-15:28		**#55 S-A1.9** *Lian Hongfei, Jiang Yanwen, Fan Hongqi, Viktar Tsviatkou, Alexander Gusinsky* A Fast Bayesian Compressive Sensing Super-Resolution Method for Forward-Looking Imaging Radar
15:30-15:50		**Afternoon Recharge (20 minutes)**
15:50-17:40		Session Chairman: Dr. Boris Zhalezka (BNTU, Belarus)
15:50-16:02 (online)	Session Talks **S-B1**	**#37 S-B1.1** *Archvadze Natela, Pkhovelishvili Merab, Shetsiruli Lia* Strategy for Building Multi-Step Forecasting Models
16:02-16:14 (online)		**#107 S-B1.2** *Denisov Evgeny, Shindor Olga* Features of Electrical Fluctuations Wavelet Transform for Hydrogen Fuel Cell Diagnostics
16:14-16:26		**#84 S-B1.3** *Novoselova Natalia, Tom Igor* Disease modules identification using gene mutations and biological networks
16:26-16:38		**#21 S-B1.4** *Guzarevich Anna, Tuzikov Alexander* Genomic-Based Algorithms for Identification of Mycobacterium Tuberculosis and Nontuberculous Mycobacteria
16:38-16:50 (online)		**#22 S-B1.5** *Spasić Slađana, Tomašević Violeta* Predicting Student Performance Using the Multilayer Perceptron Method Combined with Traditional Evaluation Techniques
16:50-17:02 (online)		**#50 S-B1.6** *Zakharov Igor, Bobby Pradeep, Howell Mark* SIApp: Sea Ice Analyzer Application
17:02-17:14		**#18 S-B1.7** *Hanchar Hanna, Furs Kanstantsin, Wang Yixin, Lyu Liang-Dong, Tuzikov Alexander, Andrianov Alexander* Computational Identification of Novel Potential Inhibitors Against the InhA Enzyme of Mycobacterium tuberculosis Using a Drug Repurposing Strategy
17:14-17:26		**#20 S-B1.8** *Furs Kanstantsin, Laikou Yan, Hanchar Hanna, Tuzikov Alexander, Andrianov Alexander* Comparative Evaluation of the Performance of Scoring Functions in Docking-Based Virtual Screening and Drug Design
17:26-17:38		**#88 S-B1.9** *Zhalezka Boris, Korolenok Karina, Shamardzina Iryna* Theory and Practice of Procedures Digitalization for Designing Lightweight Parts Based on Cellular Structures

17:40-18:00	Stretch & Talk **Break** (20 minutes)	
18:00-19:00	Session Chairman: **Pavel Khrustalev (KSTA, Russia)**	
18:00-18:07	Flash Session **F-A2**	**#49 F-A2.1** *Sushchenko Andrei, Rudykh Roman* Impact of Data Augmentation on Plant Disease Classification Using Transfer Learning
18:07-18:14 **(online)**		**#56 F-A2.2** *Kharinov Mikhail* Recurrent Low-Parameter Multi-Otsu Method for Image Structure Extraction
18:14-18:21		**#25 F-A2.3** *Khrustalev Pavel* Orientation of Unmanned Ground Vehicle in Software Control Mode
18:21-18:28		**#26 F-A2.4** *Khrustalev Pavel, Smyshnikov Roman, Bryndin Dmitrii, Matveev Sergei* Hardware Features of Modern Unmanned Ground Vehicles
18:28-18:35		**#54 F-A2.5** *Afanasyeva Svetlana, Kuznetsov Kirill, Seleznev Tim, Amosova Elena* Detection of Oil Pollution in Oceanic Waters
18:35-18:42		**#75 F-A2.6** *TangNone Yi, Pertsau Dmitry* Multi-Constraint Enhanced DWA for Robust and Smooth Local Navigation
18:42-18:49		**#115 F-A2.7** *Kravchuk Vladimir, Arkhipov Andrey* Development of a Vision System for Assessing the Surmount Ability of Obstacles in the Path of a Mobile Robot
19:00	End of the official program of the day 1	
19:30-23:00	**Walking Dinner & Reception by Innotech Solutions**	

Day 2 – **Wednesday (September 17, 2025) / Minsk Time Zone (GMT+3)**

09:00-09:30	Get Connecting / Networking

09:30-10:40	Session Chairman: **Prof. Vassili Kovalev (UIIP NASB, Belarus)**

09:30-10:40	Plenary	**P2** *Sergey Markoff* **From LLM Agents to Practical AGI: The Cutting Edge of Research and a Human-Centric Approach**

10:40-11:00	Morning **Coffee** (20 minutes)

11:00-13:30	Session Chairman: **Tim Seleznev (FEFU, Russia)**

Time	Session	Talk
11:00-11:12 (online)	Session Talks S-B2	**#32 S-B2.1** *Usatyuk Vasiliy, Egorov Sergey* Graph-Based Sparse Random Projections with Cycle Optimization for Feature Expansion
11:12-11:24 (online)		**#33 S-B2.2** *Usatyuk Vasiliy, Sapozhnikov Denis, Egorov Sergey* Scalable Bethe-Permanent Approximations and Graph Sparsification for Mitigating Over-Smoothing in GNNs with RBIM Embeddings
11:24-11:36 (online)		**#73 S-B2.3** *Jiang Nana, Luo Huiqi Xue Haoyu, Li Ruochen, Zhu Jubo* Localized Bootstrap Contrastive Learning Network for Few-Shot PolSAR Image Classification
11:36-11:48 (online)		**#117 S-B2.4** *Huo Jingyang, Lu Haozong, Ren Yi, Lu QuanCheng, Lei Qining, Fan Hongqi* Design and Implementation of a Lightweight UGS System Using Dual Geophones
11:48-12:00 (online)		**#44 S-B2.5** Khasanov Ildar, Khasanova Diana From Data to Diagnosis: Voice as a Digital Biomarker in Parkinson's Disease Patients
12:00-12:12 (online)		**#38 S-B2.6** *Song Qingqing, Xia Shaoliang* Change-Point Detection Utilizing Normalized Entropy as a Fundamental Metric
12:12-12:24		**#42 S-B2.7** *Seleznev Tim, Kuznetsov Kirill, Amosova Elena, Afanasyeva Svetlana* Predicting Red Tides from Biological Samples in the Sea of Japan and Bering Sea Using Machine Learning Methods
12:24-12:36 (online)		**#45 S-B2.8** *Xia Shaoliang, Song Qingqing* Multi-Horizon Node-Level Resource Optimization in Cloud Infrastructures via Machine Learning and Particle Swarm Optimization
12:36-12:48 (online)		**#77 S-B2.9** *Ananyev Roman, Isaev Igor, Obornev Ivan, Rodionov Eugeny, Shimelevich Mikhail, Dolenko Sergey* Application of Algorithms for Selection and Analysis of Multicollinear Input Features in Solving Inverse Problems of Exploration Geophysics

12:48-13:00	Session Talks **S-B2**	**#80 S-B2.10** *Gong Shengshuo, Shen Qiujie, Varlamov Oleg* MIVAR Decision-Making System for Cargo Distribution and Transportation by Groups of Warehouse Robots
13:00-13:12		**#81 S-B2.11** *Shen Qiujie, Gong ShengShuo, Oleg Varlamov* MIVAR Expert System-Based Information Decision Model for Automated Robots in Dynamic Environments
13:12-13:24 (online)		**#91 S-B2.12** *Kanturski Jan, Kłopotek Robert* Flood Prediction Based on Artificial Intelligence and Edge Computing
13:30-14:20		Networking **Lunch** (50 minutes)
14:20-15:45		Session Moderator: **Dr. Alexei Belotserkovsky (UIIP NASB, Belarus)**
14:20-15:45 5 min slots	Lightning Talks **L2**	**#137 L2.1** *Kaubasa Halina, Azarov Elias* Learning to Synthesize: GAN Optimization with Imitation and Distribution Feedback
		#113 L2.2 *Baranova Vasilina, Spiridonov Alexander* Video Data Processing Algorithm for Optical Surveillance Systems to Detect and Determine Orbits of Unknown Space Objects
		#116 L2.3 *Lopatko Eguene* Development of a ROS-Based Mobile Robot for High-Precision Indoor Mapping
		#119 L2.4 *Himbitskaya Elena, Svistunova Kseniya, Kezik Siarhei* Segmentation-Based Attention Mask for Enhancing Fundus Image Diagnosing
		#123 L2.5 *Karkotskiy Alexander* Comparison of Alternative Methods to Laplacian Pyramidal Decomposition in Image Fusion Problem
		#128 L2.6 (online) *Krech Nastassia* Reconstruction of the Spectral Image from RGB Images
		#134 L2.7 *Senkin Aleksey* Assessing Carbon Absorption in Drone Images
		#112 L2.8 *Saladukha Artsiom, Kovalev Vassili* Controlled image generation with generative adversarial networks
		#138 L2.9 *Adamova Alisa* Comparative Analysis of HRV Parameters Using Time Series and Absolute Increments in Normal and Arrhythmic ECG Signals
		#139 L2.10 (online) *Yurtunbaev Danil, Egorov Gleb* Distributed Analytical Energy Monitoring System
		#140 L2.11 (online) *Budanov Konstantin* Evaluation of effectiveness of the method of multilevel amplitude discrimination of ECG signal in arrhythmia detection

	Lightning Talks L2	**#141 L2.12** *Saetchnikov Ivan, Skakun Victor, Tcherniavskaia Elina* Hybrid Deep Semi-Supervised Learning Model for Sparse Distributed Object Recognition in Multi-Parameter Data
		#142 L2.13 *Halian Artsiom, Kovalev Vassili* Methods for reconstructing parts training images from a pre-trained neural network
15:45-16:00		**Stretch & Talk Break (15 minutes)**
16:00-17:40		Session Chairman: **Prof. Jianfei Wu (NUDT, China)**
16:00-16:12	**Session Talks S-A3**	**#67 S-A3.1** *Adamovsky Egor, Bohush Rykhard, Tamashevich Mikita* Real-time smoke detection in video based on single-board computer
16:12-16:24		**#68 S-A3.2** *Wu Xianyi, Ye Shiping, Ablameyko Sergey* Target Detection in Remote Sensing Images based on improved YOLOv11 by SuperTokenAttention mechanism
16:24-16:36		**#94 S-A3.3** *Liu Jiahan, Dang Zhifeng, Xiong Shuang, Ma Jun, Qi Xiexing, Li Gaofeng* Russian Handwriting Recognition Using VGG-BiLSTM-CTC Transfer Learning
16:36-16:48		**#95 S-A3.4** *Poleshchenko Dmitriy, Mikhailov Ilia* Automatic Identification and Quality Assessment of Potato Planting Rows Using UAV Imagery
16:48-17:00		**#98 S-A3.5** *Sun Jiazhi, Li Dongdong, Chen Rui, Gao Zhinan, Kuai Yangliu* Towards Unified Transformer for Drone Based Multi-Task Object Detection
17:00-17:12		**#106 S-A3.6** *Pertsau Dmitry, Khatsianevich Artsemi* Segmentation Algorithms in Processing Satellite Images
17:12-17:24		**#121 S-A3.7** *Zhukovsky Evgeny, Xuqing Feng, Xitong Liang, Nedzved Alexander* A PCA-Based Approach for Dynamic Yellow Chromatophore Detection in Cuttlefish Skin
17:24-17:36		**#143 S-A3.8** *Vengerenko Vadim, Inyutin Alexander* Approaches to the Printed Circuit Board Defects Detection
17:40-18:00		**Networking Recharge (20 minutes)**
18:00-19:30		Session Chairman: **Dr. Valiaryan Ivashenka (BSUIR, Minsk)**
18:00-18:07	**Flash Session F-B3**	**#64 F-B3.1** *Amosova Elena, Kuznetsov Kirill* Solution of Direct and Inverse Problems of Mathematical Physics Using a New Projection Method Physics Informed Neural Networks (PINN).
18:07-18:14		**#65 F-B3.2** *Zahariev Vadim* Hybrid Voice Activity Detection and Speaker Gender Separation Model
18:14-18:21 (online)		**#78 F-B3.3** *Mushchina Anastasia, Isaev Igor, Burikov Sergei, Dolenko Tatiana, Dolenko Sergei* Use of Variational Autoencoders to Enhance the Representativity of Experimental Data

18:21-18:28 (online)		**#129 F-B3.4** *Rozhnov Aleksei, Hallikar Rohini., Tyurin Sergey,Gudov Gennady* Applied Issues of Experimental Media Content Synthesis: System Integration of Tasks and Evaluation of Information Processing Efficiency
18:28-18:35 (online)		**#133 F-B3.5** *Rozhnov Aleksei, Tyurin Sergey* An Exploratory Study on Psychoacoustic Technologies for Intelligent Transport Systems: A Preliminary Assessment of Efficiency and Data Management
18:35-18:42		**#101 F-B3.6** *Vorobeychikov Sergey, Burkatovskaya Yulia* Parameter Estimation for Arbitrary Order MMPP
18:42-18:49	Flash Session **F-B3**	**#108 F-B3.7** *Li Gaofeng, Wang Wenqi, Zhang Xu, Zhao Shuyi, Zhang Chi* Inter-Channel Attention Transformer for POLinSAR Image Classification
18:49-18:56		**#111 F-B3.8** 111 *Krivalcevich Egor, Vashkevich Maxim* Practical Aspects of FPGA Implementation of Neural Network for Image Classification Based on Learned Separable Transform
18:56-19:03		**#114 F-B3.9** 114 *Krasnoproshin Daniil, Vashkevich Maxim* Speech Emotion Recognition Using LSTM-based Neural Network with Local Attention
19:03-19:10		**#132 F-B3.10** *Ivashenka Valiaryan* Semantic space: between continuity and infinity
19:10-19:17		**#144 F-B3.11** *Parkhimenka Uladzimir, Bykau Aliaksei* Pattern Recognition in Structural Dynamics of Input-output Data (China's Economy, 1981–2018)
19:17-19:24		**#40 F-B3.12** *Kurochka Konstantin, Panarin Kosntantin, Karpenko Daniil* An Approach to Resource-Efficient Optimization for Real-Time Computer Vision-Based OHS Monitoring on Resource-Constrained Industrial Objects
19:30		End of the official program of the day 2

Day 3 – **Thursday (September 18, 2025) / Minsk Time Zone (GMT+3)**

09:00-09:30		Get Connecting / Networking
09:30-10:30		Session Chairman: **Acad. Sergey Ablameyko (UIIP NASB, Belarus)**
09:30-10:00 (online)	Plenary	**P3.1** *Hongqi Fan* **Object Motion Mode Identification Based on Radar Signature**
10:00-10:30		**P3.2** *Dongdong Li* **Exploring Efficient and Effective Sequence Learning for Visual Object Tracking**
10:30-10:50		Morning **Coffee** (20 minutes)
10:50-12:10		Session Chairman: **Dr. Dongdong Li (NUDT, China)**
10:50-11:02 (online)	Session Talks S-A4	**#16 S-A4.1** *Qi Qiming, Fan Hongqi, Wang Guoyan, Li Biao, Pan Yonglei* A 3D Vision Simulator for Multi-Camera Systems
11:02-11:14 (online)		**#27 S-A4.2** *Yuan Tao, Li Yuanzhe, Fan Hongqi, Zhao Feng, He Feng, Dong Zhen* Joint Range-Angle Unambiguous Estimation Based on DAPSO-OMP for FDA-MIMO Radar
11:14-11:26 (online)		**#34 S-A4.3** *Bai Heng, Ding Qingtang, Yang Jungang, Liu Haoxufei* Leverage Semantic Prior from SAM for Super-Resolution
11:26-11:38 (online)		**#46 S-A4.4** *Pan YongLei, Wang Guoyan, Qi Qiming, Fan Hongqi, Li Biao, He Jun* MCDSO: A Direct Visual SLAM System for Wilderness Environments Using Multiple Cameras
11:38-11:50 (online)		**#48 S-A4.5** *Zhou Jiwei, Wang Pu, He Jiajie, An Chengjin, Yang Jungang, Zhao Wending* Efficient Light Field Image Super-Resolution with Shared-Attention Transformers
11:50-12:02 (online)		**#66 S-A4.6** *Yu Lian, Li Dongsheng, Wang Guoyan, Fan Hongqi* Design and Verification of a Centralized Multi-Agent Visual SLAM System Based on Cloud-Native Architecture
12:02 -12:08 (online)		**#28 S-A4.7** *Li Jun, Liu Qiuyu, Jiang Yanwen, Lian Hongfei, Zeng Xiangen* A Demodulation Method for DDMA-MIMO in Strong Clutter Background
12:10-13:00	Networking **Lunch** (50 minutes)	ATR Challenge — Session Moderator: **Dr. Dongdong Li (NUDT, China)** • **Track 1:** Cross-Modal Visual Prompt-Based Object Matching and Recognition • **Track 2:** Optical Detection and Recognition of Vehicles in UAV Imagery

13:00-15:40	Moderator: **Dr. Marina Lukashevich (BSU, Belarus)**
13:00-13:12	**#62 B4.1** *Pukhovskaya Polina, Prokhorov Igor* Localization methods of scattering inhomogeneities in acoustic imaging
13:12-13:24	**#63 B4.2** *Safiullin Tuleubay, Malugin Vladimir* Calculating High-Frequency Consumer Price Sub-Indexes: Web-Scraping and Classification
13:24-13:36	**#69 B4.3** *Kim Tatyana* Control of an Anthropomorphic Walking Robot Using Reinforcement Learning
13:36-13:48	**#70 B4.4** *Ivaniuk Alexander, Burko Liana* Unclonable identification and true random number generation based on CRO PUF
13:48-14:00	**#71 B4.5** *Zianouka Yauheniya, Dydo Olga, Zhalova Daria, Khokhlov Vitali, Bakunovich Andrei, Kykharevich Gleb* An automatic bird voice recognition system based on artificial intelligence technologies
14:00-14:12	**#72 B4.6** *Filippov Maxim* Theoretical study and experimental verification of recognition algorithms based on the measure of precedence
14:12-14:24	**#135 B4.7** *Osipov Aleksey, Petrovsky Nick* FPGA Implementation of Quatenionic Fully Connected Neural Network for Image Classification
14:24-14:36 (online)	**#97 B4.8** *Bekiyeva Maral, Orazdurdyyeva Gulshat, Orazova Ogulbibi* Encoding and Information Protection Algorithms in Digital Communication Channels
14:36-14:48 (online)	**#100 B4.9** *Tashliyev Arslan, Amansahedov Charyyar* AI-Assisted Static and Dynamic Analysis of Foundation Beams with Variable Thickness on Stochastic Elastic Foundations
14:48-15:00	**#103 B4.10** *Vychugzhanin Mikhail, Kireev Nikita, Kuzmin Andrey* Determination of movement types based on wrist accelerometer data using machine learning technology
15:00-15:12	**#118 B4.11** *Yuxiang Chen, Andrianov Alexander, Tuzikov Alexander* Combining Hierarchical Clustering and Multi-Stage Feature Selection to Identify Drug Resistance–Associated Single Nucleotide Polymorphisms in Mycobacterium tuberculosis
15:12-15:24	**#130 B4.12** *Vengerenko Vadim, Lukashevich Marina* Neural Network Architecture Search Approach for Telemetry Data Classification
15:24-15:36	**#131 B4.13** *Varvashevich Angelina, Kovalev Vassili* Defenses for preventing attacks in the task of classifying medical images

(Session Talks S-B4)

15:40-16:00		Afternoon **Recharge** (20 minutes)
16:00-16:15	Ceremony	**LIGHTNING TALKS AWARD CEREMONY** *Organizers:* • The State Scientific Institution "The United Institute of Informatics Problems of the National Academy of Sciences of Belarus" (Belarus) • VEB Technologies (Belarus) *Evaluation Committee:* • Acad. Prof. Sergey Ablameyko (BSU). *Committee Chairman* • Dr. Marina Lukashevich • Prof. Alexander Nedzved
16:15-16:45	Closing	• Prof. Alexander Tuzikov (UIIP NASB). Conference Chairman • Acad. Prof. Sergey Ablameyko (BSU). Conference Vice-Chairman • Dr. Alexei Belotserkovsky (UIIP NASB)
		Open Floor – **Walking Mic**
16:45-17:15		**Goodbye-Coffee**
18:00		End of the official program of the Conference

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