



**NeuroNT'21**

**II IEEE INTERNATIONAL  
CONFERENCE  
ON NEURAL NETWORKS  
AND NEUROTECHNOLOGIES**

**P R O G R A M M E**



**June 16, 2021**

**Russia, Saint-Petersburg**

**PROGRAMME**  
**II International Conference**  
**on Neural Networks and Neurotechnologies**  
**NeuroNT'2021**  
**June 16, 2021**  
**Saint Petersburg Electrotechnical University «LETI»**  
**ETU «LETI»**  
**(Zoom)**

**June 16, 2021**

**10:30-11:00**

Registration and testing (Zoom)

**11:00-11:15**

**Mikhail S. Kupriyanov** (Doctor of Technical Sciences, Professor, Head of the Department of Computer Engineering, Saint Petersburg Electrotechnical University "LETI" (ETU))

**Welcome speech**

**11:15-11:45**

**SESSION 1**

**HYBRID INTELLIGENCE BUILDING CONCEPTS**

Tools for Hardware and Software Implementation of Neuro-fuzzy Systems

*Morozov S.M., Kupriyanov M.S.*

**11:45-13:45**

**SESSION 2**

**ARTIFICIAL INTELLIGENCE TECHNOLOGIES AND THEIR APPLICATIONS**

Self-Tuning PID Controller Using a Neural Network for Nonlinear Exoskeleton System

*Belov M.P., Dinh Dang Truong, Pham Van Tuan*

Forward Propagation Neural Network Weighting Analysis as a Model Estimation Method

*Zhangirov T.R., Krevchik A.B., Zuev D.V., Liss A.A., Ekalo A.V., Grigoryeva N.Yu.*

XAI Evaluation: Evaluating Black-Box Model Explanations for Prediction

*Yuyi Zhang, Feiran Xu, Jingying Zou, Petrosian O.L., Krinkin K.V.*

Comparison of Data Clustering Methods in the Gas Transportation System

*Petrova A.K., Sinitca A.M.*

Using OpenMP to Optimize Model Training Process in Machine Learning Algorithms

*Mohammed O.T., Heidari M.S., Paznikov A.A.*

Intelligent Information Security Management of Cyber-physical Systems

*Shichkina Yu.A., Fatkueva R.R.*

Research of Test Results of Guide Dogs and Information on their Origin

*Bekeneva Y.A.*

Neural Network Approach to Overcoming a Priori Uncertainty in Optimal Action Planning of Intelligent Information Agents for Soft Architectures of Service-oriented Systems

*Ptitsyna L.K., El Sabayar Shevchenko N.N., Belov M.P., Ptitsyn A.V.*

**13:45-15:30**

**SESSION 3**

**DATA MANAGEMENT AND ORGANIZATION OF COMPUTING IN INTELLIGENT SYSTEMS**

An Approach to Translating a Database from MySQL to Cassandra

*Muon Ha, Shichkina Yu.A.*

Element Base of Pulse Neural Network Units

*Bureneva O.I.*

Adaptive Neuro-fuzzy System (ANFIS) of Information Interaction in Industrial Internet of Things Networks Taking into Account Load Balancing

*Mukeshimana C., Kupriyanov M.K.*

Protocol for the Interaction of Agents Solving the Problem of Distributed Data Analysis

*Gonzalez Perez Yuleisy, Kholod I.I.*

Data Processing in Foggy Computing Environments for Machine Learning

*Subbotin A.N.*

Isometric Vector Neuroanalyzer

*Safyannikov N.M., Bureneva O.I., Aleksanyan Z.A., Chepasov A.E.*

**15:30 - 15:45**

**CLOSURE OF THE CONFERENCE**



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