II IEEE INTERNATIONAL CONFERENCE ON NEURAL NETWORKS AND NEUROTECHNOLOGIES

PROGRAMME

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

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., Fatkieva 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
Pitsyna L.K., El Sabayar Shevchenko N.N., Belov M.P., Pitsyn 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