Session Program

6–8 Jul 2022

6th International Workshop on Deep Learning in Computational Physics (DLCP-2022)

Session 3. Machine learning in Biology and Other Natural Sciences

Thursday 7 July

14:00

Session 3. Machine learning in Biology and Other Natural Sciences
Session | Location:

14:00–14:30

IT ecosystem based on machine learning methods and data analysis technologies for radiobiological research

Speaker
Oksana Streltsova

14:30–14:45

Application of a neural network approach to the task of the arena marking for the behavioral test «Open Field»

Speaker
Anastasia Anikina

14:45–15:00   **Google Earth Engine and machine learning for Earth monitoring**

Speaker
Alexander Uzhinskiy

15:00–15:15

Data-driven approximation of downward solar radiation flux based on all-sky optical imagery using machine learning models trained on DASIO dataset.

Speaker
Vasilisa Koshkina

15:15–15:30

Artificial neural networks for multi-label cloud types classification from all-sky optical imagery over the ocean.

Speaker
Nikita Veremev

15:30–15:45

Approximation of high-resolution surface wind speed in the North Atlantic using discriminative and generative neural models based on RAS-NAAD 40-year hindcast

Speaker
Vadim Rezvov

15:45–16:00   **Underwater biotope mapping: automatic processing of underwater video data**

Speaker
Oleg Iakushkin

16:00

16:20

Session 3. Machine learning in Biology and Other Natural Sciences
Session | Location:

16:20–16:35

Hazy Images Dataset With Localized Light Sources For Experimental Evaluation Of Dehazing Methods

Speaker
Andrei Filin

16:35–16:50

Neural network recovery of missing data of one geophysical method from known data of another one in solving inverse problems of exploration geophysics.

Speaker

Mr Igor Isaev

16:50–17:05

Предсказание матрицы контактов для коротких пептидов с использованием свёрточной нейронной сети

Speaker

Artem Maminov

17:05–17:20

Visual clustering of ocean sediment grains using a combination of unsupervised machine learning methods.

Speaker

Viktor Golikov

17:20–17:35   **Accuracy of COVID-19 evolution models for different forecast horizons**

Speaker

Mr Saveliy Zavertyaev

17:35–17:50

Taking into Account Mutual Correlations during Selection of Significant Input Features in Neural Network Solution of Inverse Problem s of Spectroscopy

Speaker

Nickolay Shchurov

17:50–18:05   **In situ wind speed nowcasting using data-driven approach.**

Speaker

Viktor Golikov

18:25