

THEORETICAL KNOWLEDGE AND PRACTICAL SKILLS IN THE FIELD OF MACHINE LEARNING

ECTS credits: 4.0











# **BRIEF DESCRIPTION**

The camp covers various topics in the field of modern machine learning. The participants will learn the principles of machine learning, gain experience with neural networks, and become familiar with ML models, their selection, and optimization. Students are expected to know at least one programming language at an intermediate level and be familiar with the foundations of higher mathematics and probability theory.

# CONTENT

- Introduction to Machine Learning
- Basic Models
- Linear Models. Support Vector Machine
- Probabilistic Classifiers. Trees and Ensembles
- Model Selection and Optimization
- Clustering
- Introduction to Neural Networks. Neural Networks and Optimization
- Convolutional Neural Networks. Recurrent Neural Networks
- Dimensionality Reduction
- Noise Filtering and Missing Values Completion











## **Program dates:**

2 weeks July 7-20, 2025

## Registration deadline:

15.04.2025

#### Required Knowledge

- Programming language skills (Python / C++/ Java)
- Proficiency in English language (B1 and higher)

Cost: US\$865, in two installments:

First installment: US\$350 untill April 15ht'25 Second installment: US\$515 untill June 15ht '25

#### Includes:

- Registration
- Tuition
- Tour of St. Petersburg
- All taxes
- Study materials
- Russian virtual survival course (49 h)
- Migrational support for Visa

