

Data Scientist

STUDIA PODYPLOMOWE

Study program

9

192

11

2

Liczba miesięcy nauki Liczba godzin zajęć Liczba zjazdów Liczba semestrów

BASICS OF STATISTICS WITH THE APPLICATION OF R/PYTHON

- Introduction to the problems of descriptive statistics (8 h)
- Introduction to mathematical statistics (testing procedure) (8h)

DATA ANALYSIS IN PYTHON

- Syntax, Arrays, Functions, and Panda (19 h)

DATA ANALYSIS IN R

- R and RStudio environment, atomic types, vectors, lists, functions, data cleaning (19 h)

ADVANCED VISUALIZATION METHODS (Plotly, Dash, R Shiny) R/Python

- Building interactive reports/applications (18 h)

SQL BASICS

- ERD diagrams, Normalization, SQL DDL, SQL DM (18 h)

MACHINE LEARNING IN PRACTICE (R/PYTHON)

- Supervised machine learning algorithms (linear regression, random forests, xgboost, time series analysis) (18 h)

INTRODUCTION TO DEEP LEARNING ALGORITHMS (KERAS, TESNOR-FLOW)

- Neural networks in the processing of numerical, categorical and image data (16 godz.)

DATA ANALYSIS BY MEANS OF SPARK (INTEGRATION WITH PYTHON AND R)

- Data processing and modelling in integration with Python and R (12 h)

ADVANCED SQL

- DDL/DML. Advanced quering (10 h)
- SQL integration with Python (10 h)

NON-RELATIVE DATABASES (NOSQL)-NP. MONGODB, ELASTIC, NOE4J. INTRODUCTION TO THE NOSQL DATABASE

- Querying of sample NOSQL databases (12 h)

ANALYST'S INTERPERSONAL SKILLS

- Image building psychology. The art of persuasion and public speaking (7 h)
- Methods of presentation and reporting (7h)

GIT - BASICS

- GIT - BASICS (2h)

PROJECT

- Project Seminar (8h)

ASSESSMENT FORM

- Final test (1 h)
- Final exam (1 h)