

Practical Data Science with Watson Studio



This workshop will lead participants through a discovery of Watson Studio, IBM's Cloud Data Science and AI platform. Hands-on lab will contribute to acquiring practical skills, by providing a first approach to the methodologies and tooling, through examples and hands-on experience. Attendees will leave with an understanding and appreciation of the many facets of Data Science, and how to begin understanding patterns and deriving insight from their data.

Date: 05.02.2020 10:00 – 16:00
06.02.2020 10:00 – 16:00

Location: IBM Warsaw, ul. Krakowiaków 32, room 132

Gain an understanding and appreciation of the practicalities of Data Science using **Watson Studio**, IBM's data science and AI platform. Learn how to leverage data within Watson Studio and apply analytics and Machine Learning to solve data-intensive business problems. Understand Data Science methodology and end-to-end workflow including data exploration and preparation, model building, validation, and deployment. Use Watson Studio on IBM Cloud to practice and experiment Data Science through hands-on labs.

Highlights:

IBM Watson Studio (formerly Data Science Experience)
Data Science fundamentals with Jupyter notebooks, Pandas and Spark
Data Visualisation with dashboards, PixieDust and Brunel
Watson Studio Data and Model flow Tools
Spark, Watson Machine Learning

Agenda

DAY 1

1) Data Science fundamentals introduction and overview

- Overview of IBM's Analytics, Data Science and AI offering and rationale. Introduction to Data Science elements and techniques, notebooks. Team and Collaboration features. Overview of Watson Studio cloud offering's capabilities, compute and storage perspectives
- Lab 1: Getting Started with Watson Studio on IBM Cloud
- Start exploring data with various tools, Data Refinery, Jupyter notebooks with Pandas and Spark

2) Data Visualisation with Watson Studio

- Introduction to Data Visualisation in Watson Studio, Dashboards, visualisation techniques overview
- Data Refinery and visual exploration, Watson Studio dashboards
- Lab 2: Data Visualisation with Watson Studio, Watson Studio Dashboards

3) Watson Studio interactive flow tooling, Data and Model flows Builders

- Introduction to Watson Studio Data and Model flows
- Lab 3: Prepare your data with Watson Studio Data pipeline and Modeler flow

4) Machine Learning with Watson Studio

- Introduction to Machine Learning
- Overview of frameworks, SparkML, Scikit Learn, SPSS, Watson ML
- Lab 4: Using Flow Modeler for time series prediction

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DAY 2

1) Deep Learning and Neural Networks Overview

- Lab 1: Building a hand-written digits recognition Neural Network with WML GPU training

2) AI fairness with Watson OpenScale

- Lab 2: Detecting Bias with Watson OpenScale

3) Advanced AI topics: Continuous Learning, Neural Synthesis, Spark environments

- Lab 3: NueNetS, WML Continuous Learning, Spark

Prerequisites:

Basic understanding of Data handling, basic programming ability.

Hands-on labs will be performed on IBM Watson Studio hosted within the IBM Cloud. Participants should have an IBM Cloud account and will be running the User Interface on their own laptop.

Instructor: Philippe Gregoire, Analytics & IoT I/T Specialist, **the workshop will be held in English.**

Registration:

kamila.lis@ibm.com

Please include: name, surname, company's name
e-mail adress

