Blockchain / AL / ML

Data Science Fundamentals
#010202

CHF 9.000 exkl. MwSt.	Beginn: 08/01/2024 Ende: 02/02/2024	Dauer: 20 Tage	Ort: Circle 6 Zürich Airport

Blockchain / AL / ML	DevOps	Kubernetes / Openshift
Cyber Security	Microsoft Azure	Amazon Web Services
Google Cloud Plattform	Programmierung	Sensorik
Digital Marketing	VMware / Infrastruktur	Apache Kafka

Key Learnings

◦ Python Programming for Data Science (Pandas, Numpy, Sklearn)

◦ Basic Statistics for Data Science and Hypothesis Testing

◦ Advanced Regression Techniques

◦ Advanced Data Manipulation and Feature Engineering

◦ Basics of Machine Learning

◦ Advanced Data Visualization with Python (Dash-Plotly)

Target Group

Experienced: Python Developers, R programmers

Anforderungen

Basic Python including:

◦ Basic logic: If/else, try/except, for/while

◦ Data types: list, int, float, string, dict, set, etc...

◦ Object Oriented Programming: Functions and Classes

◦ Basic Familiarity with Unix-based command-line

◦ Basic Familiarity with Version-Control like Git (NOT Mandatory)

◦ API basics (NOT Mandatory)

◦ REST (post, get, delete, etc...)

◦ Database Basics (NOT Mandatory)

◦ Basic SQL queries

Programm Inhalt

Week 1:

◦ Introduction to Git

◦ Object-Oriented Python — Revisited

◦ Basic Statistics for Data Science

◦ Introduction to Hypothesis Tests

◦ Introduction to Regression

Week 2:

- ◦ Regression: revisited
- ◦ Introduction to Non-Linear Regression
- ◦ Time-Series Regression
- ◦ Forecasting
- ◦ Confidence Intervals

Week 3:

- ◦ Data Manipulation and advanced Pandas functions
- ◦ Introduction to Data Visualization (plotly / dash)
- ◦ Introduction to Machine Learning
- ◦ Examples of Projects
- ◦ Feature Engineering

Week 4:

- ◦ Machine Learning Implementation
- ◦ Forecasting with Non-Linear Regression Implementation
- ◦ Advanced Data visualization
- ◦ Students finish the month with a fully functioning Dash Web-application to visualize the results of their project!

Result:

Start-To-Finish Web-application for Data Science Applications