

Course description

Big Data Analytics II
5 ECTS
Grading: 1-5
Language: English

A Data Engineer is a person who prepares Big Data for data users. But what kind of work does a Data Engineer do? This course introduces you to the work of the Data Engineer and the process of Big Data Analysis. You will also learn what the terms “edge computing” and “cloud computing” mean and analyze IP packet data to find out different Big Data characteristics and anomalies in practice.

Learning outcomes:

- Understand the role of Data Engineers
- Getting familiar with the process of Big Data Analytics
- Building a simple data processing pipeline
- Learn to evaluate your dataset
- Understand what anomalies are
- Getting familiar with edge computing and cloud computing
- Calculate Big Data characteristics and anomalies from an IP packet dataset.

Course contents:

- Introduction: Who is the Data Engineer?
- Big Data Analytics - Process
- Big Data Analytics - Tools
- Evaluating datasets
- Anomaly Detection
- Edge computing vs. centralized cloud computing
- Exercise: Big Data from IP packets