

# Gradoop

BOSS'20 workshop (<https://boss-workshop.github.io/boss-2020>)

## Abstract

Gradoop is a distributed, open source framework for complex graph analytics build on top of Apache Flink. It provides a graph data model which extends the widespread property graph model by the concept of graph collections and a set of operators. Operators, e.g., for pattern matching, graph transformations and structural grouping, as well as graph algorithms can be applied on a logical graph and graph collections. The flexible combination of these operators allows a declarative definition of graph analytical workflows that can be easily executed on a shared nothing Apache Flink cluster.

## Outline

In the Gradoop tutorial you will learn about the key ideas in distributed graph analytics. For that purpose, we prepared several chapters where we shed light on how to get started, how to use our analytical operators and how to execute analytical pipelines with Gradoop. Each chapter contains two parts. First, an introduction and demonstration of the current topic and second, time for practice where you can apply the given knowledge to solve example analytical questions. During hands-on practice time, we are tuned to help and answer your questions. At the end of the tutorial session we will give a deeper look into Gradoop's future development goals and our ongoing research.

## Technology

Participants in the tutorial must have the following software installed: Java 11, Maven 3.\*, Git and an IDE of your choice (Intellij preferred).

## Presenters

Kevin Gomez, University of Leipzig, [gomez@informatik.uni-leipzig](mailto:gomez@informatik.uni-leipzig).

Christopher Rost, University of Leipzig, [rost@informatik.uni-leipzig.de](mailto:rost@informatik.uni-leipzig.de)

## Useful Links

System's Github Repo: <http://www.gradoop.com>

System's Wiki: <https://github.com/dbs->

Tutorial Repo: <https://github.com/dbs->