Ville Vainio

Msc thesis press release

October 13, 2019

New paper at Aalto University tries to make analyzing stock market data easier for novices

Ville Vainio from Aalto University studies in his computer science master thesis titled "Engineering analytics of big data pipelines for stock market data" systems that are used to analyze stock market data and challenges that new novice data scientists can face while building these. The thesis proposes a method that newcomers can use to build these pipelines more easily.

Stock market data has been a popular subject of many studies because of its lucrative possibilities and ability to reflect information from other fields that affect its course. The amount of this data grows yearly and because of this, studying it becomes harder and harder without knowledge on how to build systems that can handle this kind of big data. Unfortunately, this knowledge can be really hard to obtain as the available information can be scattered, outdated or simply missing altogether.

Vainio presents in his thesis a study on the challenges that newcomers, who are not familiar with big data technologies and stock data analysis, can face when they are faced with a task of building this kind of system. Based on this study, Vainio proposes a method that these newcomers can use to build their own systems more easily and help other newcomers while doing so.

The method streamlines the selection of data sources and technologies and suggests a way of building a pipeline that is sustainable and easy to reproduce. It also helps to reduce costs that can occur when testing a new system with big data. Unfortunately, as a result the system runs only on one computer, where in big data context scalability to multiple computers is crucial. Nevertheless, the produced result should still in theory have the ability to be able to scale to multiple machines, but more research on this would still be needed.

More Information:

Master thesis writer, Ville Vainio, ville.vainio@aalto.fi