Ville Vainio

Msc thesis press release

October 13, 2019

New paper at Aalto University sheds a light on the systems that analyze stock market data

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. Resulting information can be used to build these systems more easily when the size of analyzed data is very large.

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 year by year 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.

Vainio presents in his thesis an analysis on the existing systems that analyze stock market in this scale and builds a platform that can be used as a base for further analysis on this kind of data. The platform is highly portable meaning it can be run on most of the computers that researchers are using. At the same time, it offers capabilities that can be used to run the same system in highly efficient distributed environments, where multiple computers run the system simultaneously.

Valuable information about the practical challenges, that were faced even when building a single system, are presented with solutions to these challenges. This combined with information about existing systems and possible systems, can help researchers to build their own systems from ground up.

The system produced is open-source, so its code is available for everybody to use and modify as they see fit. The system is not the most efficient one on the market nor does it fulfill every use case there is. The goal of the system is not to be a ready-made product but to act as a base where it is easy to develop more complex systems onto.

More Information:

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