



Bachelor-, Master- und Doktorandenseminar  
des Instituts für Informatik

## Managing Sensors Data using Time-series Databases and a Comparison between three Prominent Representatives

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The Internet of Things (IoT) is the future of managing and controlling our environment. From the IoT point of view there is a huge amount of time-series data every second in our environment which needs to be collected, stored and analyzed. Therefore, we need optimized systems known as time series databases (TSDB) for handling large-scale time-series data. This large-scale data is usually called big data. Big data is meanwhile a very popular term that describes important characteristics of big data, such as volume, velocity and variety. In many application domains, the collection and analysis of big data may lead to a better decisions.

There is a range of different time-series databases, but which one should we choose is based on our system requirements and before that we must know capabilities of databases to have a better decision. Explore in some open time-series databases, evaluate them and find a suitable solution to saving collected time-series data from sensors based on my use case is the objective of this thesis. In the thesis, I will compare the performance and core features of three prominent representatives TSDB, namely InfluxDB, OpenTSDB and KairosDB, for common time-series workloads.

Mittwoch, den 23.11.2016, 17:45 Uhr im  
Besprechungsraum 106, IfI, Julius-Albert-Straße 4