Timeseries gone wild: small- & big-data analysis with Software-EKG

Invited Industry Talk

Stefan Krause and Harald Störrle[1]

[1] QAware, Germany

`harald.stoerrle@qaware.de`

What do a smart watch, an aircraft, time tracking tools and SonarCube have in common? They all store time series! Temperature curve, booked working hours, the development of software metrics over time like memory usage or the number of coding violations. In all areas of life we meet on time series. There are also a countless number of tools to visualize and analyze them.

But what happens when you like to link the data of different domains? For example, to explore the connection between peeks in overtime and software quality? How to interactively analyze data that has been collected over several years and consists of tens of billions of measurement points? At this point typical standard tools fails.

For this reason, QAware uses and improves its own analytics software called Software-EKG for many years. In this session we will look at the approaches that Software-EKG uses to hedge the requirements like the ones mentioned above. Using real-life examples, we how a few functions lift a treasure of data that always have been there, but never where accessible.