

## **Predictive maintenance based on the adaptive outlier identification in sensory vibration measurements**

### **Abstract**

We would like to devote our presentation to the issue of identifying the state of a device signalling an impending failure. The basis for the analysis is the sensory data recorded for an operating device. In our solution we assume that it is important for the dispatcher to limit the number of presented alarms to the really important ones. Therefore, our system uses dispatcher interaction to learn which generated alarms are typically false. The presented solution is based on an outlier identification method and uses XAI to reduce false positives. The developed approach allows the method to be applied in cases where no failures have yet occurred in the monitored data. We will show the validity of the proposed solution through a case study for industrial data.