

## **Charlotte Lacoquelle dealing with irregularly sampled and distorted data for anomaly detection of industrial robots”**

The current goal of our thesis is to detect problems in the production line of the manufacturer Vitesco Technologies, by performing outlier detection on the data produced by the industrial robots during their repetitive tasks. The difficulty is that the datasets suffer from large gaps of missing values, the cycles from distortion and that there are no examples of normal cycles. In this context, we present a framework that includes the design of a prototype, computed as a barycenter, that synthesizes a set of unlabeled time series. The prototype then allows us to perform unsupervised time-series outlier detection.

**AN  
ITI  
DA  
YS**

**ANITI**