Anomaly detection in time series for TBM
A literatue review of the useful AD-method for Tunnuling

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Abstract

Introduction

In the context of TBM, we will define anomaly detection as the detection of physical event that will provoke an unsolicited degradation of a given efficiency function. Where an efficiency function is some function that converts the machine state to a value that wants to be maximized by the user.

One can prove that this definition is a special cases of the labeling one, by labeling the decrease of the given efficiency function and retroactively the time series of sensors witch where influenced by the root cause event.

1 Secondary sources

2 Overview

3 Selection

4 Description

5 Evaluation

Conclusion