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AI4I 2020 Predictive Maintenance Dataset

Donated on 8/29/2020

The AI4I 2020 Predictive Maintenance Dataset is a synthetic dataset that reflects real predictive maintenance data encountered in industry.

Dataset Characteristics
Multivariate, Time-Series

Subject Area
Computer Science
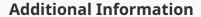
Associated Tasks
Classification, Regression, Causal-Discovery

Feature Type
Real

Instances
10000

Features
6

Dataset Information ^

Additional Information
Since real predictive maintenance datasets are generally difficult to obtain and in particular difficult to publish, we present and provide a synthetic dataset that reflects real predictive maintenance encountered in industry to the best of our knowledge....

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Has Missing Values?
No

Introductory Paper ^

Explainable Artificial Intelligence for Predictive Maintenance Applications
By S. Matzka. 2020
Published in International Conference on Artificial Intelligence for Industries

Variables Table ⌃

Variable Name	Role	Type	Description	Units	Missing Values
UID	ID	Integer			no
Product ID	ID	Categorical			no
Type	Feature	Categorical			no
Air temperature	Feature	Continuous		K	no
Process temperature	Feature	Continuous		K	no
Rotational speed	Feature	Integer		rpm	no
Torque	Feature	Continuous		Nm	no
Tool wear	Feature	Integer		min	no
Machine failure	Target	Integer			no
TWF	Target	Integer			no

Rows per page (10 ⌄)   0 to 10 of 14   ‹   ›

Additional Variable Information ⌃

The dataset consists of 10 000 data points stored as rows with 14 features in columns
UID: unique identifier ranging from 1 to 10000
product ID: consisting of a letter L, M, or H for low (50% of all products), medium (30%) ...

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Dataset Files ⌃

File	Size
ai4i2020.csv	509.8 KB

Reviews ⌃

There are no reviews for this dataset yet.

LOGIN TO WRITE A REVIEW

⬇ **DOWNLOAD** (509.9 KB)

🐍 **IMPORT IN PYTHON**

CITE

❞ **1 citations**

👁 **42148 views**

DOI

10.24432/C5HS5C

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This allows for the sharing and adaptation of the datasets for any purpose, provided that the appropriate credit is given.

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