

Microsoft Machine Failure Detection

Welcome to the Microsoft Machine Failure Detection project! This Streamlit application is designed for predictive maintenance, featuring three key pages for hyperparameter tuning, model selection, and comprehensive visualization. Here's a quick overview of the project:

View

Project Overview

Objective: Predictive maintenance for machine failure detection using various machine learning algorithms.

Features:

- Hyperparameter tuning playground with Random Forest, Decision Tree, Logistic Regression, and SVC algorithms.
- Automatic model selection for machine failure prediction.
- Visualization page with comprehensive graphs and data previews.

Contact page with developer information for inquiries.

Files:

- `app.py`: Main Streamlit application file.
- Additional files for machine learning algorithms and data visualization.
- `requirements.txt`: List of project dependencies.

Getting Started

1. Clone the repository:

```
bash git clone https://github.com/vijaytakbhat2002/Microsoft-Machine-Failure-Detection.git
```

1. Install dependencies:

```
bash pip install -r requirements.txt
```

1. Run the application:

```
bash streamlit run app.py
```

1. Explore the different pages and functionalities for predictive maintenance.

License

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