

# README - Tata Steels Machine Failure Prediction

## # Tata Steels Machine Failure Prediction

### ## Project Overview

This project enhances predictive maintenance in steel manufacturing using machine learning.

### ## Dataset

- Features include temperature, pressure, rotational speed.
- Data preprocessing includes missing value handling, feature scaling, and normalization.

### ## Models Used

- RandomForest
- Support Vector Machine (SVM)

### ## Performance Metrics

- Accuracy

### ## How to Run

#### 1. Clone the repository:

```
``bash
git clone https://github.com/yourusername/tata-steels-failure-prediction.git
``
```

#### 2. Navigate to the project directory:

```
``bash
cd tata-steels-failure-prediction
``
```

#### 3. Install dependencies:

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

#### 4. Run the Jupyter Notebook:

```
``bash
```

jupyter notebook Tata\_Steels.ipynb  
'''

## **## Contribution**

- **\*\*Sai Venkata Sri Harsha Donga\*\***

## **## License**

**This project is licensed under the MIT License.**