# README

## Fault Detection in Time Series Data

This repository contains code for fault detection in time series data using various machine learning algorithms. The code aims to classify different types of faults present in the provided time series dataset.

## Requirements

- Python 3.x
- Libraries: `scipy`, `numpy`, `matplotlib`, `statsmodels`, `sklearn`, `pandas`, `seaborn`

## Usage

1. **Clone the Repository :**

   ```
   git clone https://github.com/yourusername/fault-detection-time-
   series.git
   cd fault-detection-time-series
   ```

2. **Install Dependencies :**

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

3. **Dataset :**

o Place your time series dataset in the `data` directory or adjust the file path in the code.
o The dataset should be in a format compatible with the provided code.

4. **Run the Code :**

   o Navigate to the directory containing the code
   o Run the main script
   o Adjust parameters, models, or hyperparameters in the code as needed.

## Contributors

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