

# Software Requirements

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## Python Version

- Python 3.8 or higher

## Required Libraries

Library	Version	Purpose
pandas	1.5.3	Reading and manipulating CSV datasets
numpy	1.23.5	Numerical operations and metrics
scikit-learn	1.3.0	ML models and metrics
xgboost	1.7.6	XGBoost model for regression tasks
tensorflow	2.13.0	Artificial Neural Network with Keras

## Optional (if using notebooks or visualizations)

- jupyterlab or notebook
- matplotlib, seaborn

## How to Install All Dependencies

Install using a requirements.txt file:

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

Or install individually:

```
pip install pandas==1.5.3
pip install numpy==1.23.5
pip install scikit-learn==1.3.0
pip install xgboost==1.7.6
pip install tensorflow==2.13.0
```