EPMS
ENGINE PREDICTIVE MAINTENANCE SYSTEM
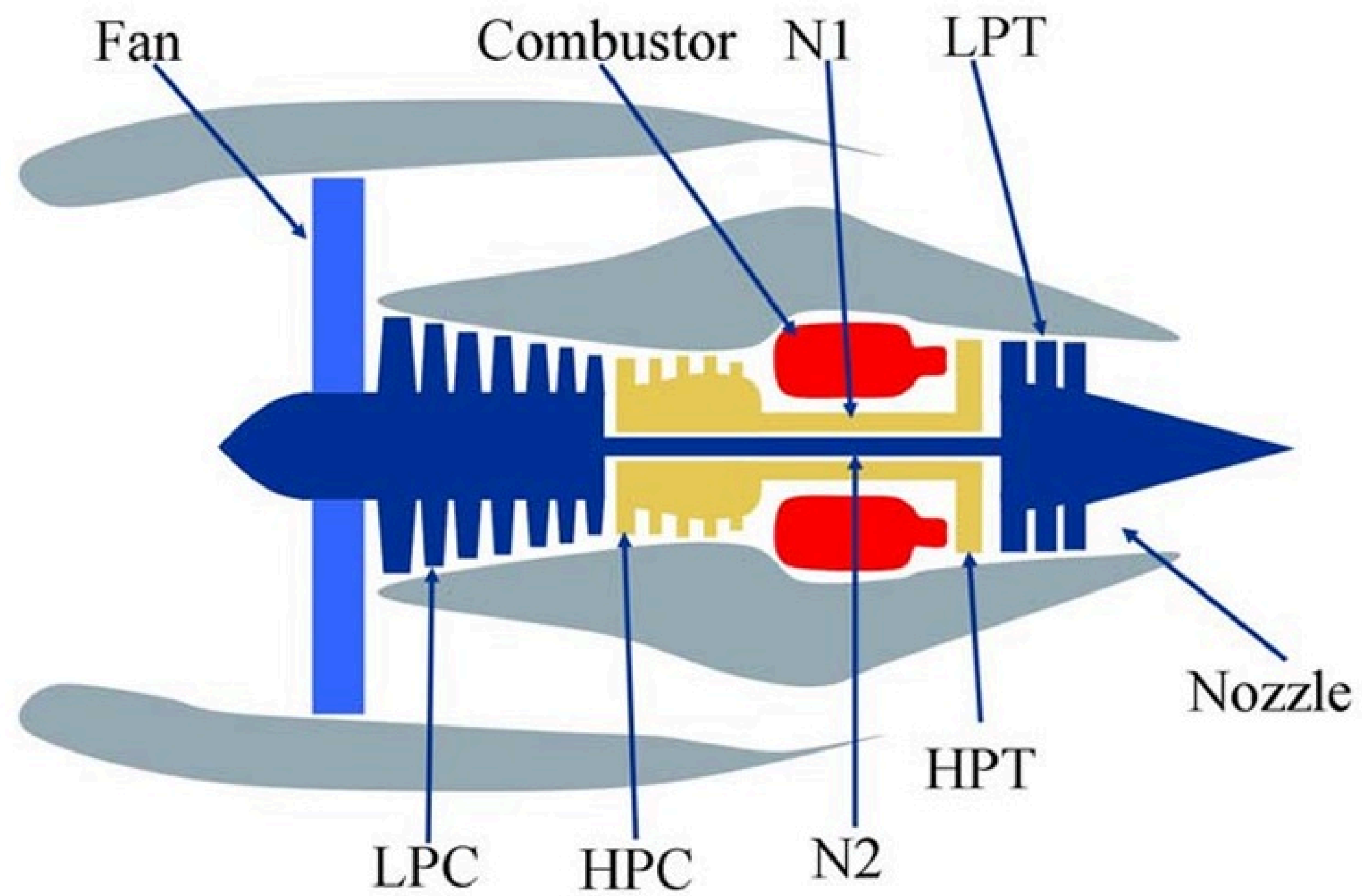
Keberth

CONTENT

THE DATASET | FD001

HPC degradation
Sea Level condition
21 diferent sensors

THE DATA SENSORS

T30	Total temperature at HPC outlet
T50	Total temperature at LPT outlet
Ps30	Static pressure at HPC outlet

THE MODEL
XGBOOST REGRESSOR

RUL   **Remaining Useful Life**

RISK_LEVEL   **HIGH, MEDIUM, LOW**

HEALTH INDICATORS

Thermal Stress on HPC
Preassure Ratio on HPC

MODEL TUNING

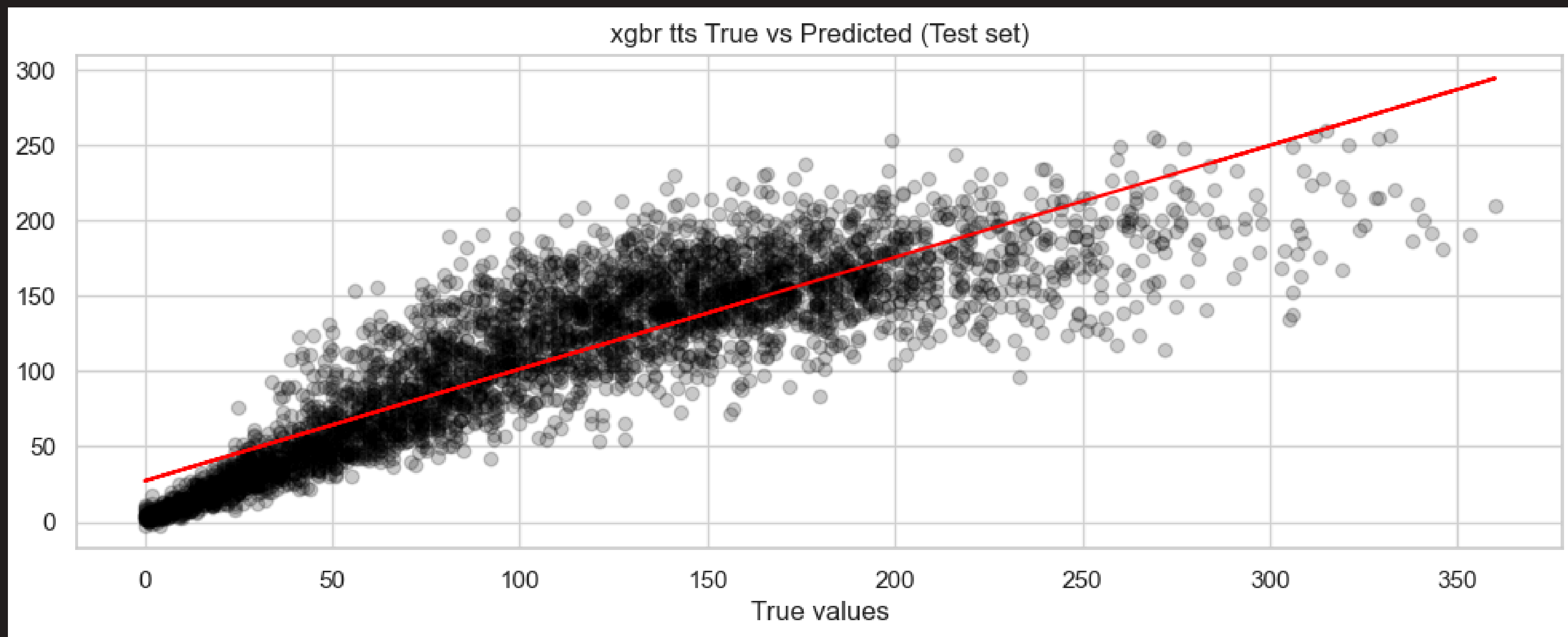# MODEL FIT

MAE

TRAIN: 16.85

TEST: 23.57

R²

TRAIN: 0.876

TEST: 0.763

xgbr tts True vs Predicted (Test set)

HOW IT WORKS?
STREAMLIT APP DEMO

THANKS

Keberth