Sibyl
A Machine Learning Driven Dashboard for Property Managers
Team Excelsior

SAHIL NAIK  JAKE YIM  RUTVIK JHA

SKYLAR WINIG  ROBIN WANG

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JACQUI MAI  KOBE SHAVOLIAN

TYLER COFFMAN  JUSTIN HARRIS

appfolio
Problem

Property Managers are overwhelmed with large volumes of accounting related data.

Property managers require an intuitive medium to understand and infer data trends.

Property Managers may lack the technical knowledge to extract financial projections from their data.
Solution

A dashboard to interactively visualize predictive insights and forecasts

Easily and clearly see future projections for accounting specific categories

Models are trained using user-specific property management data to ensure accurate predictions
Functionality

Key metrics and real time model projections can be viewed via graphs.

Filter and search features to define scope of data for category-specific expenses.

Property Managers can input their own historical data and visualize it as a graph on their dashboard.
MACHINE LEARNING

Preprocessing

ML Models

Model Inference

PROPHET

Random Forest

NRMSE = 0.24

NRMSE = 0.26
Architecture

Frontend
- React
- Highcharts

Backend
- django
- PROPHET
- PostgreSQL
Demo
Impact

Visualize History  
- Clearly see the historical trends of your data with no data science knowledge needed.

Insights of the Present  
- Understand your properties' financial health with industry-standard key metrics.

Forecast the Future  
- Provide complex and thorough model inference on your category-specific expenses.
Conclusion

Sibyl: Providing Machine Learning for Property Managers
Thank you! Questions?