

Energy Forecasting

Case Study: Private Client



FIRSTSTEP.AI APPLICATIONS

- FirstStep.ai Designer
- Multi-variable forecasts
- Weather API
- Cloud API
- SunSynk Solar PV

“ I used to wake up hoping for sunny weather. Now I can plan 5 days into the future and make informed decisions. ”

Private Client

Predicting Solar Power Output

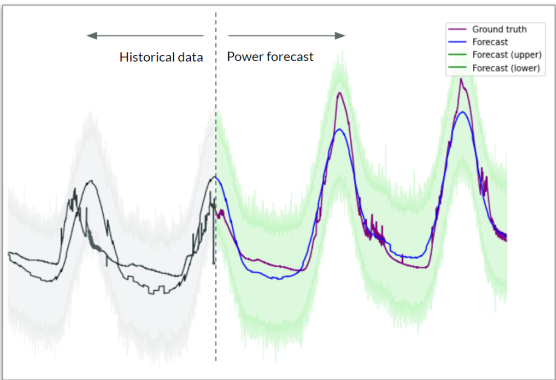
Problem Statement:

Solar energy is one of the leading renewable energy sources in the world and it continues to grow. Solar Energy depends on sunlight which is an intermittent natural resource. This makes power output predictability critical for the integration of solar photovoltaics into traditional electrical grid systems.












Solution:

FirstStep.ai created a 5-day solar output prediction AI model (with 97% accuracy) to predict the expected output of their solar panels. The model was trained on historical weather and solar data, and uses past solar data and weather forecasts to generate predictions.



AI models trained on (a) weather patterns and (b) historical panel performance

 Time	 Weather	 Wind Speed
 Cloud Cover	 Precipitation	 Wind Direction
 Humidity	 Temperature	 Visibility