



# Off-Grid Power Predictor

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Portland, Oregon

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# 126M

Grid-Tied Homes  
(US)

# 200,000

Off-Grid Homes  
(US)

# 4M

Off-Grid Homes  
(worldwide)



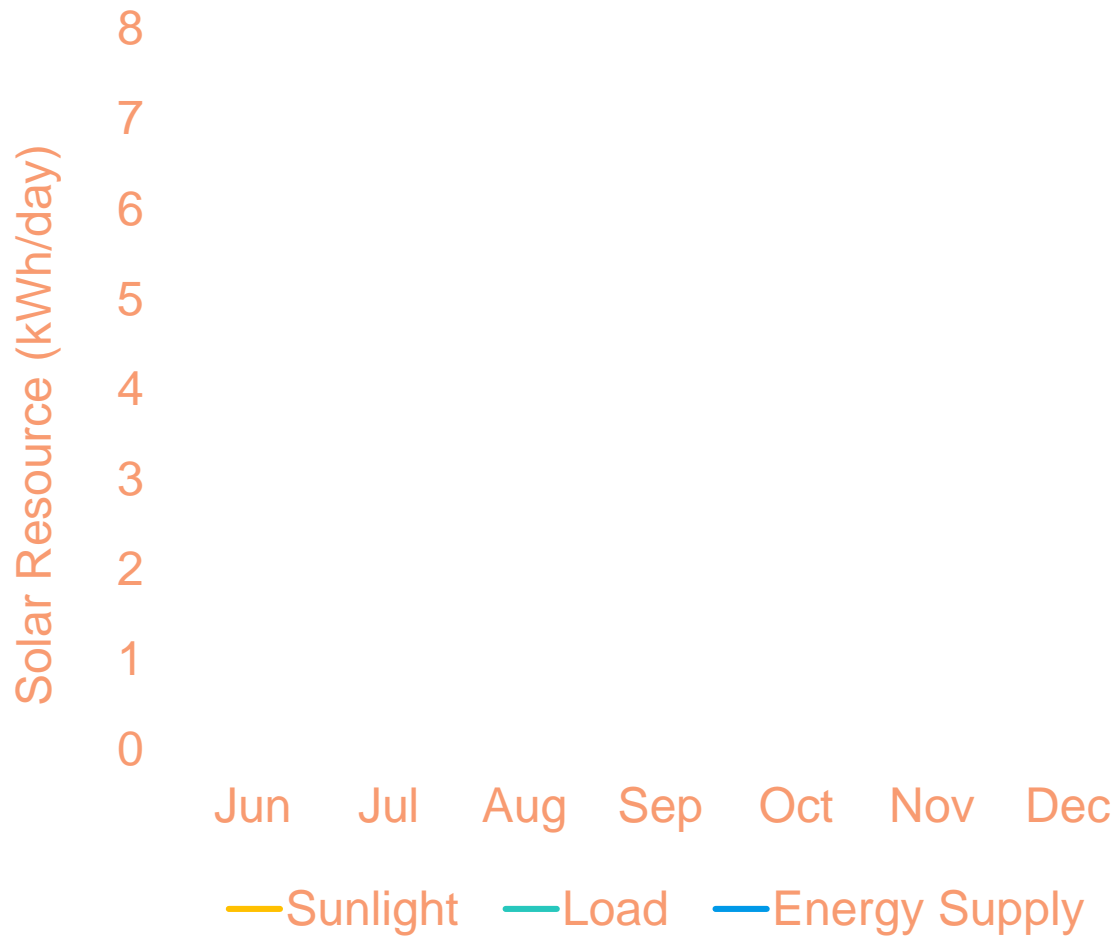
30 kWh / day



8 kWh / day

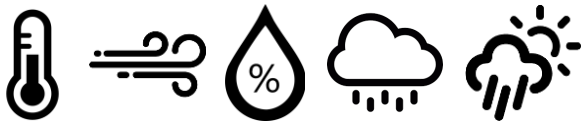


0.5 kWh / day



*Measurement and Instrumentation Data Center*  
(MIDC)



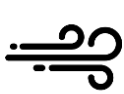


*Measurement and Instrumentation Data Center*

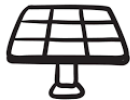
(MIDC)



WEATHER  
UNDERGROUND



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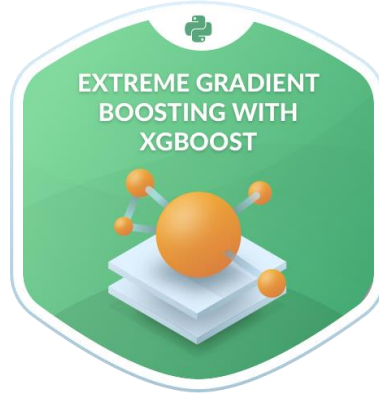
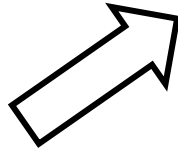
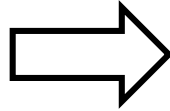
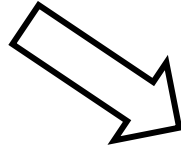
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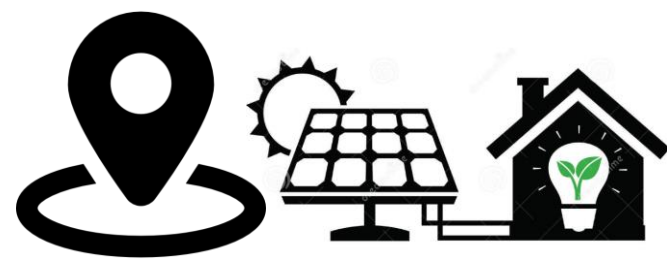


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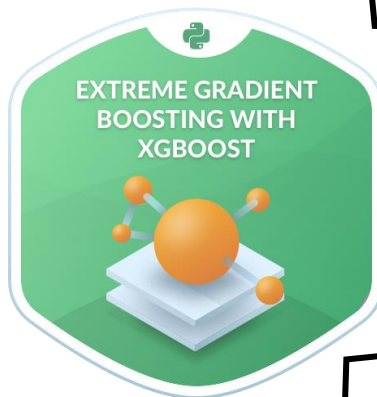
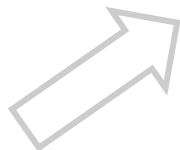
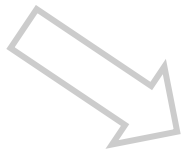
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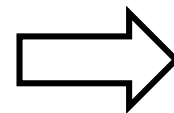
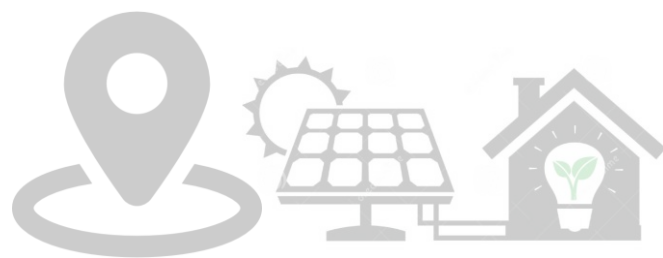
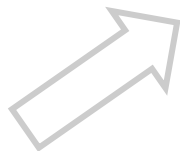
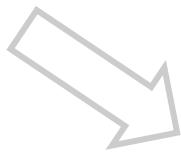
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**Next week's  
predicted  
sunlight  
and power**

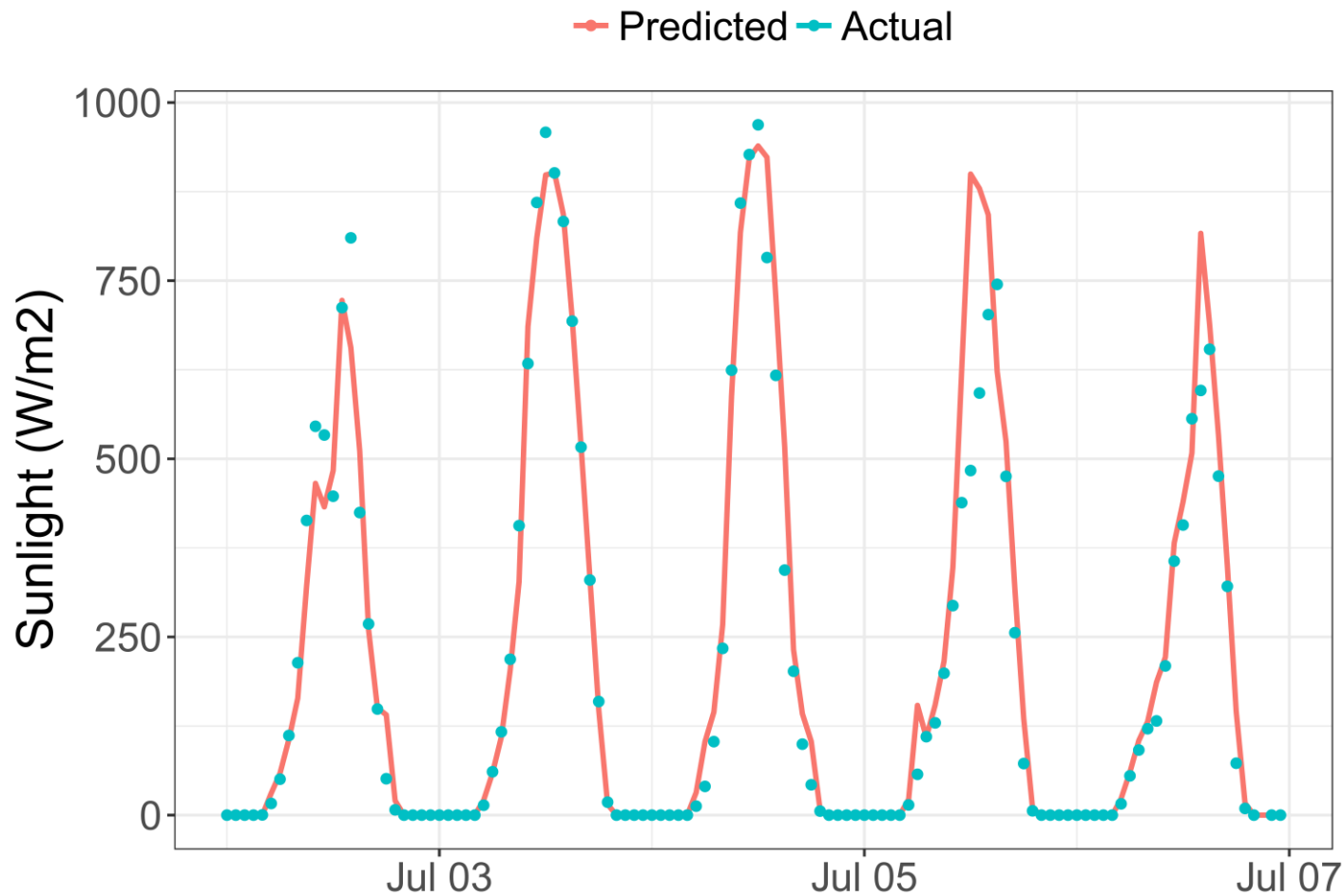


WEATHER  
UNDERGROUND



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Improvement of  
13%

RMSE =  
 $43 W/m^2$

AME =  
 $1.1 W/m^2$

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# Nick Turman-Bryant



**PhD in Systems Science    MSc in Energy, Tech, Policy**