

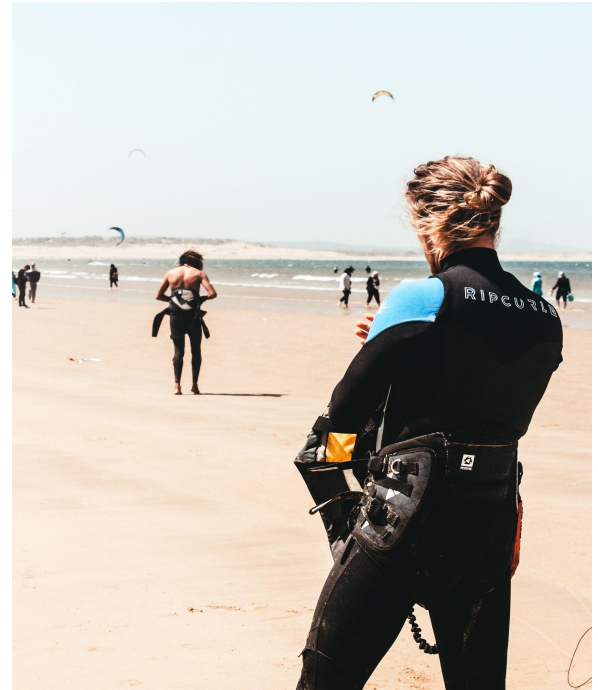
KITESURFING WITH BEGINNERS

A classification ML project
by Thalassa M. Glende

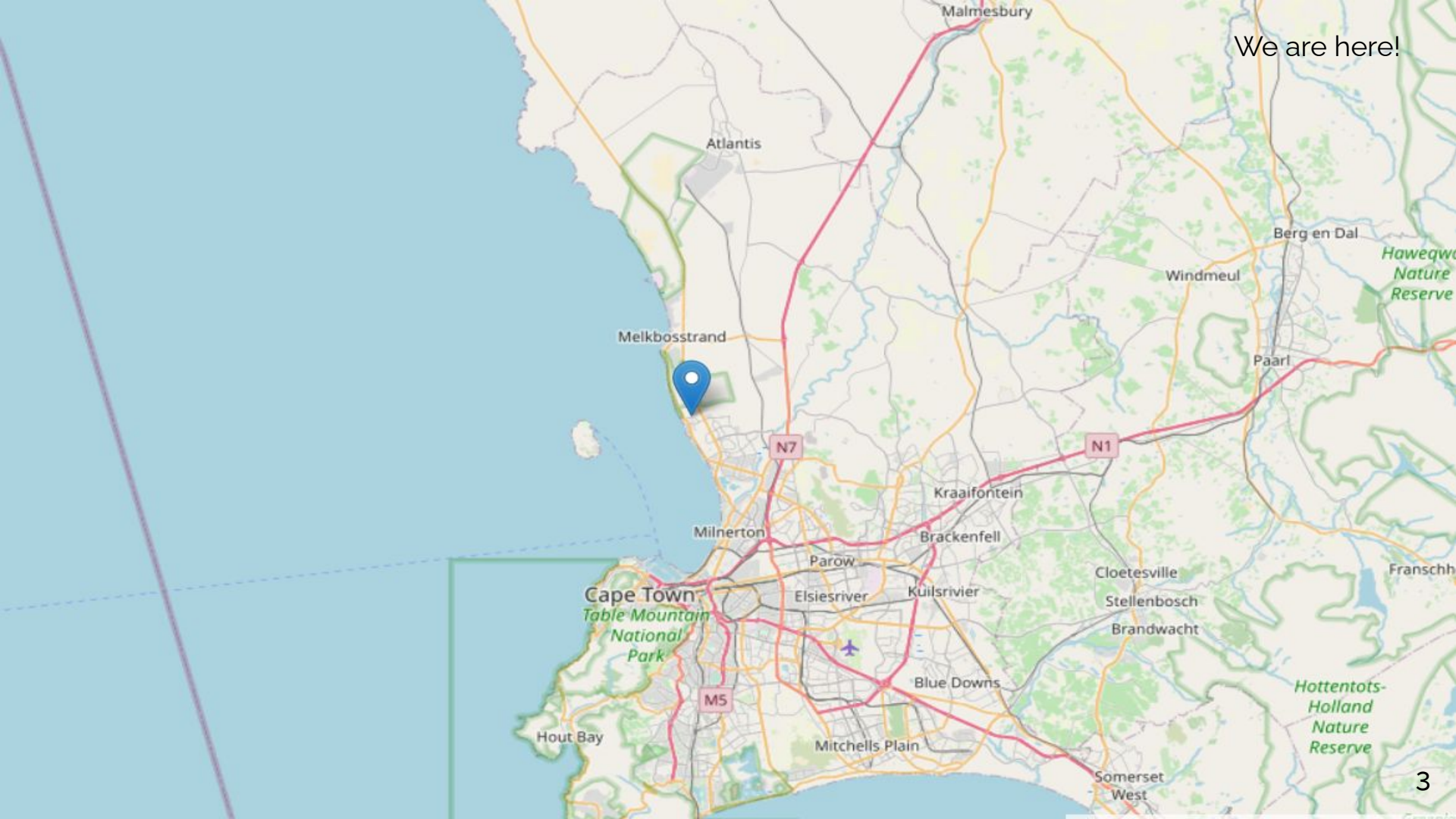
SO YOU THINK YOU CAN FLY

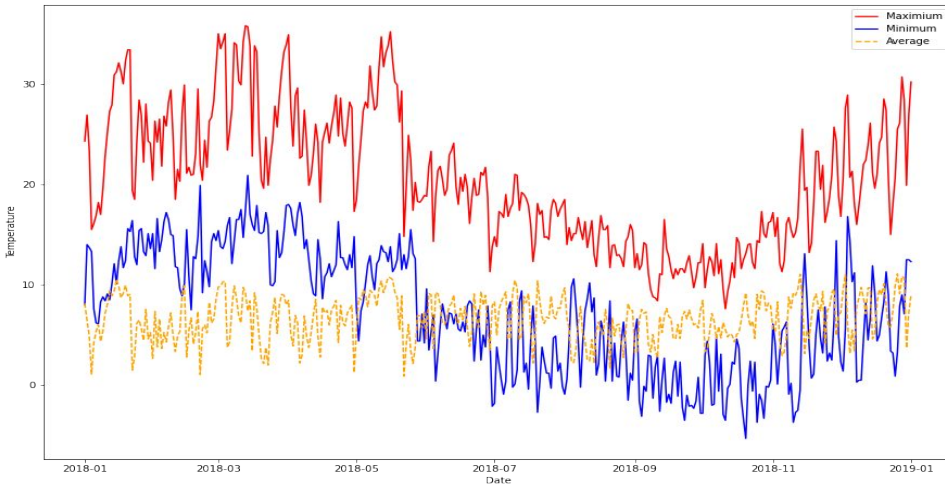
Welcome to Big Bay of South Africa. If you are new at kitesurf, suit up and let's get to it

#Can you read a weather forecast?



We are here!



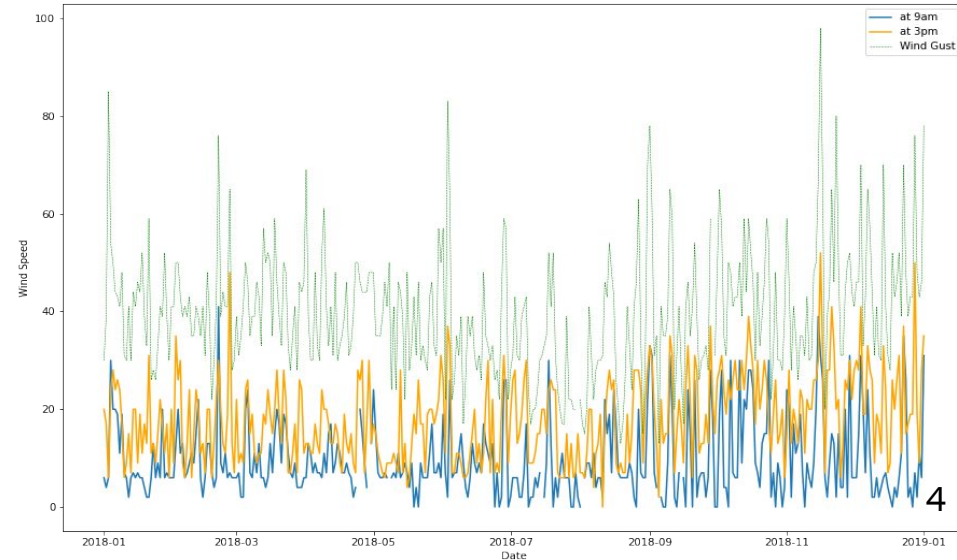


- Maximum Temperature: 35.8 Celsius
- Minimum Temperature: -5.3 Celsius
- Total of rainy days: 66

DO YOU KNOW YOUR TRIVIA?

2018

- Strongest winds: October
- Strongest wind : 52km/h
- Maximum hours of bright sunshine: 14



DANGERS

- ❑ Offshore Winds
- ❑ High Speed Winds
- ❑ Wind Gust
- ❑ Rain
- ❑ Sharks

TIPS:

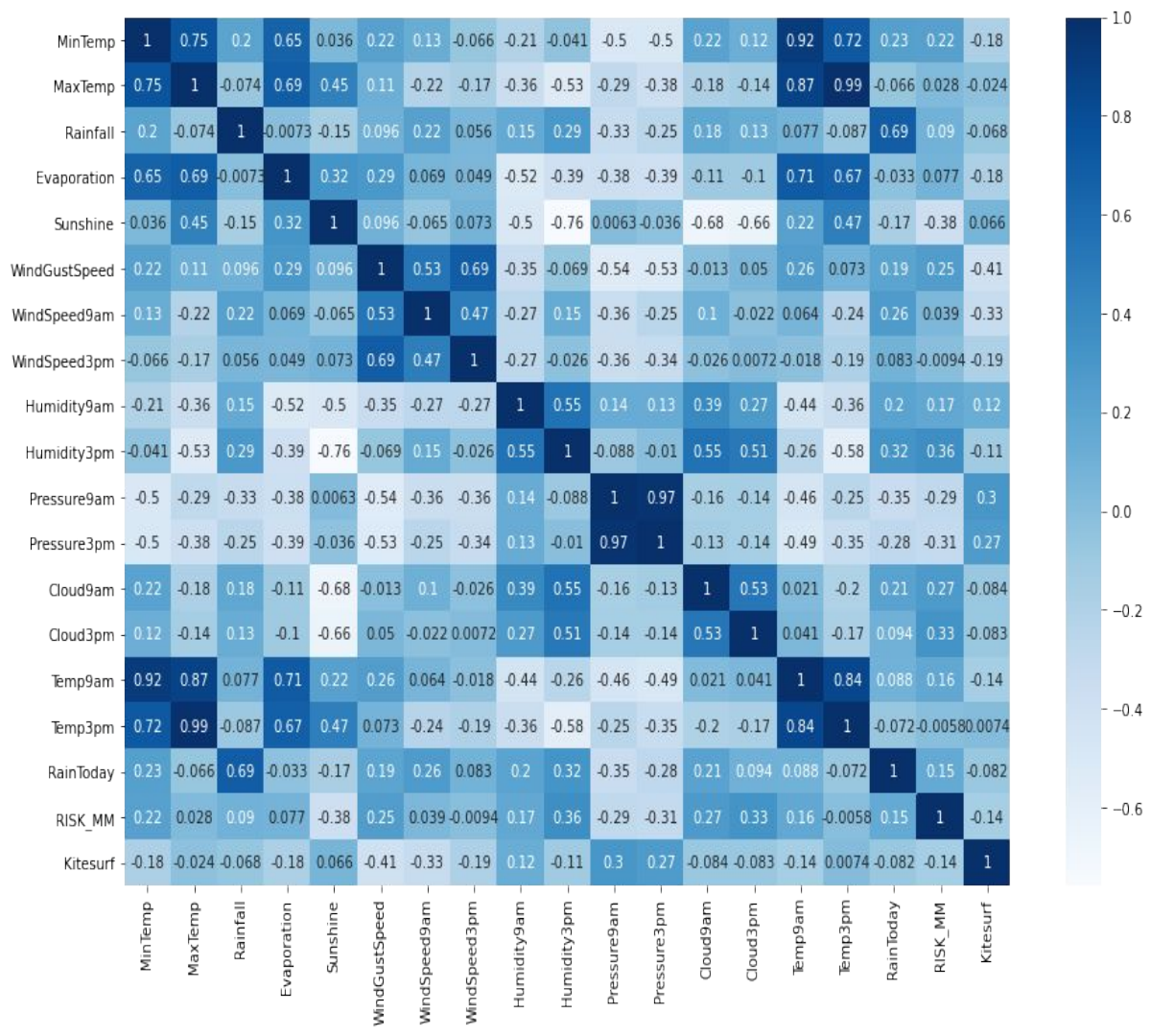
- ❑ Visit November to January
- ❑ Kitesurf early hours
- ❑ Always kitesurf with a friend
- ❑ Wear loads of sunblock!





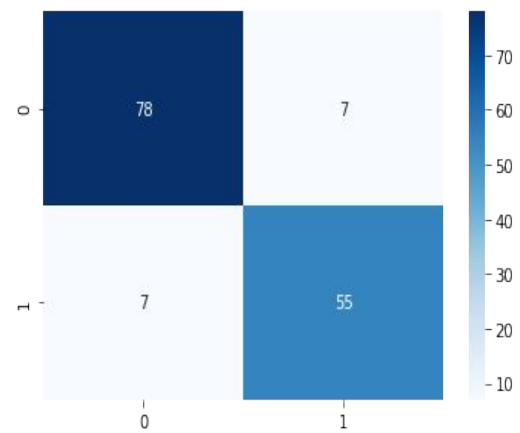
THE MAKING

- ❑ Dataset of year 2018
- ❑ Engineered a "KiteSurf" feature based on:
 - ❑ Wind direction ENE
 - ❑ Wind speed > 30
 - ❑ Wind Gust speed > 35
 - ❑ Rain



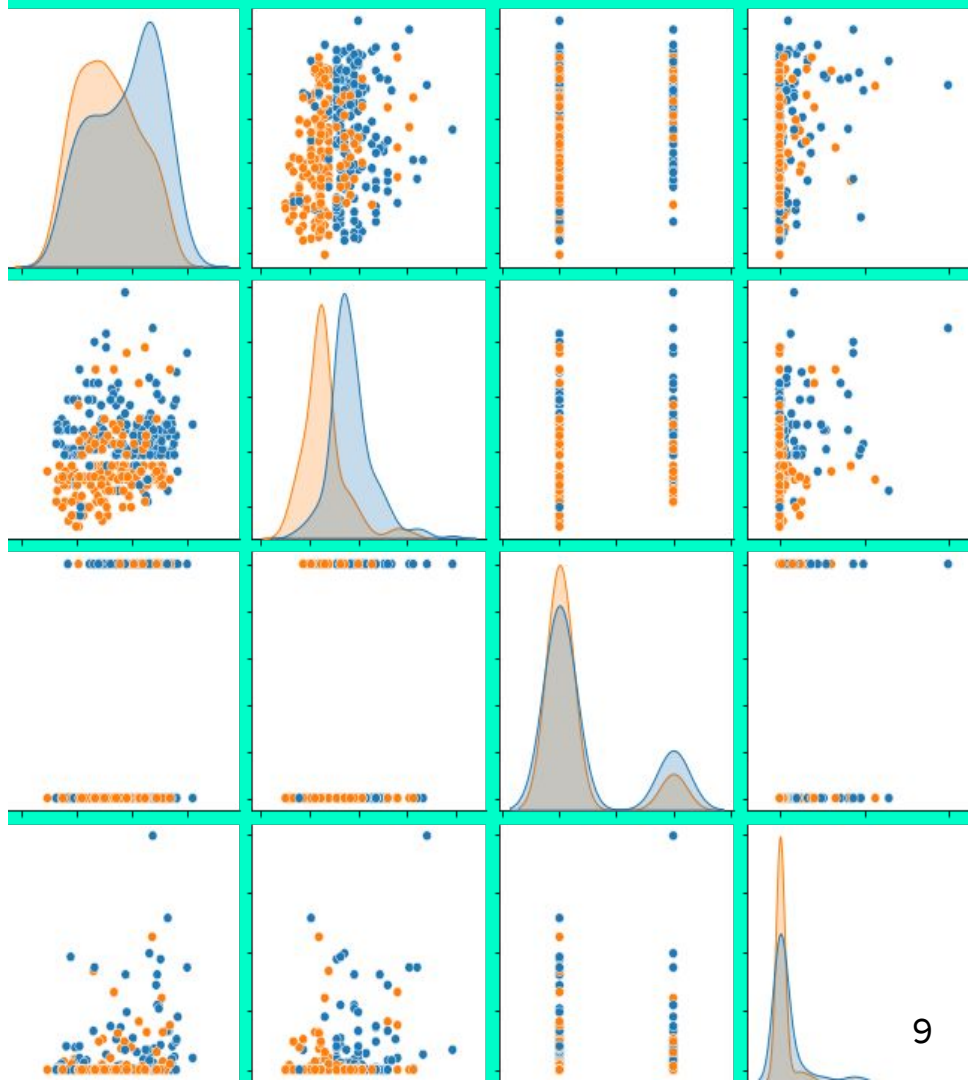
PRECISION

Our primary goal is to eliminate the chance of sending our newbies off to the beach on a FP



THE MAGIC

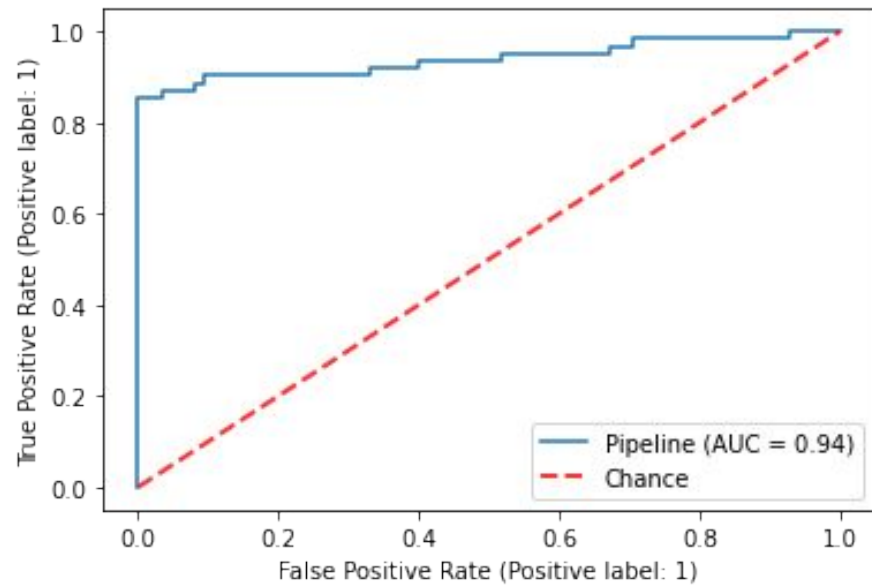
- KNNImputer
- GridSearchCV
- Boosting





THE WINNER

GBoost





ACCURACY

90%

PRECISION

89%

Using the Gboost algorithm we see our model well performing giving us a good precision which was our primary goal. We can now send our newbies off to the beach



“Let’s fly already...”

SUMMARY

- ❑ Classification ml model to forecast unfit weather for kitesurf newbies
- ❑ 2018 dataset
- ❑ Gradient Boosting Classifier
- ❑ Accuracy 90%
- ❑ Precision 89%
- ❑ Recall 89%

MANY THANKS TO

- ❑ <https://unsplash.com> for the beautiful pictures
- ❑ <https://www.kaggle.com> for the detailed dataset
- ❑ Akis, our kitesurf master