

```
In [197]: ┏ import warnings
          warnings.filterwarnings('ignore')

          import os
          from datetime import date
          import dateutil.relativedelta

          import pandas as pd                               # panda's nickname is

          import numpy as np                             # numpy as np

          from pandas import DataFrame, Series           # for convenience

          import matplotlib.pyplot as plt

          %matplotlib inline

          import pandas as pd
          import fbprophet
          from fbprophet import Prophet

          import statsmodels
          import statsmodels.api as sm
          import statsmodels.formula.api as smf
          from statsmodels.tsa.seasonal import seasonal_decompose
          from datetime import datetime

          import tensorflow as tf
          from tensorflow.contrib.timeseries.python.timeseries import NumpyReader
          import tensorflow.python.util.deprecation as deprecation
          deprecation._PRINT_DEPRECATION_WARNINGS = False
          import time
```

```
In [198]: ┏ A=pd.read_csv("issues.csv")
```

```
In [ ]: ┏
```

```
In [199]: ┏ df_data = pd.read_csv('issues.csv', parse_dates=['created_at'])
```

```
In [200]: ┏ days = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
```

In [201]: ► week\_df = df\_data.groupby(df\_data['created\_at'].dt.day\_name()).count().reindex  
week\_df

Out[201]:

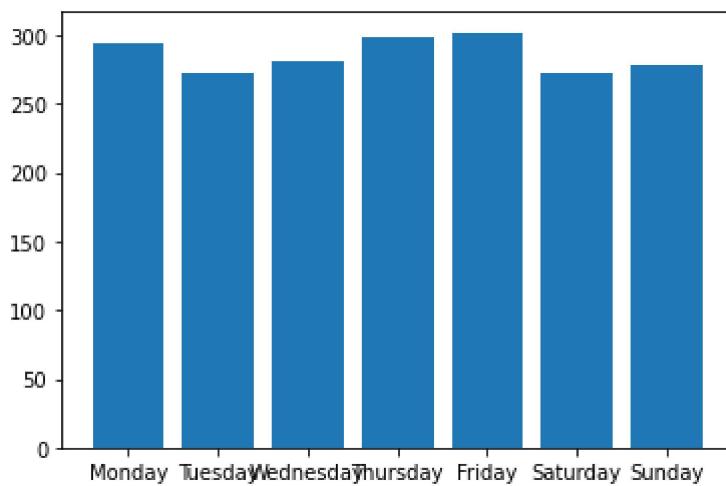
issue_number	OriginationPhase	DetectionPhase	Category	Priority	Status	creat
created_at						
<b>Monday</b>	295	295	295	295	295	295
<b>Tuesday</b>	273	273	273	273	273	273
<b>Wednesday</b>	281	281	281	281	281	281
<b>Thursday</b>	298	298	298	298	298	298
<b>Friday</b>	302	302	302	302	302	302
<b>Saturday</b>	273	273	273	273	273	273
<b>Sunday</b>	278	278	278	278	278	278

In [202]: ► week\_df['created\_at'].max()

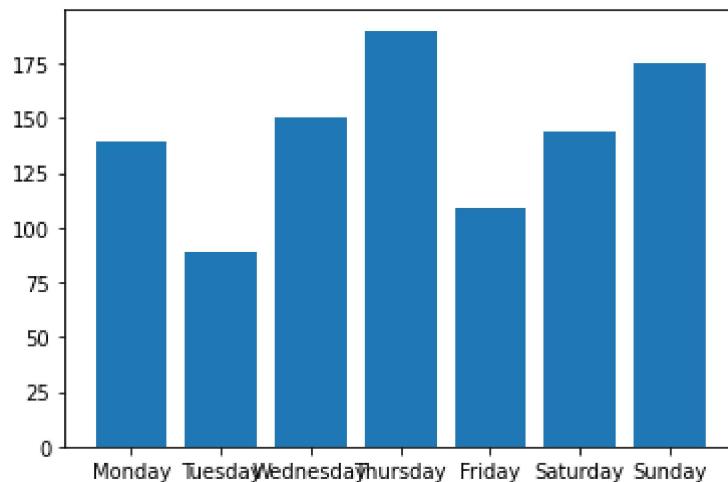
Out[202]: 302

In [203]: ► week\_df['weekday'] = week\_df.index

In [204]: ► x = week\_df['weekday']  
y = week\_df['issue\_number']  
plt.bar(x,y)  
plt.show()



In [205]: ► `plt.bar(week_df[ 'weekday' ],week_df[ 'closed_at' ])`  
`plt.show()`



In [206]: ► `A=pd.read_csv("issues.csv")`

In [207]: ► `df_data1 = pd.read_csv('issues.csv', parse_dates=['closed_at'])`

In [208]: ► `months = ['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November', 'December']`

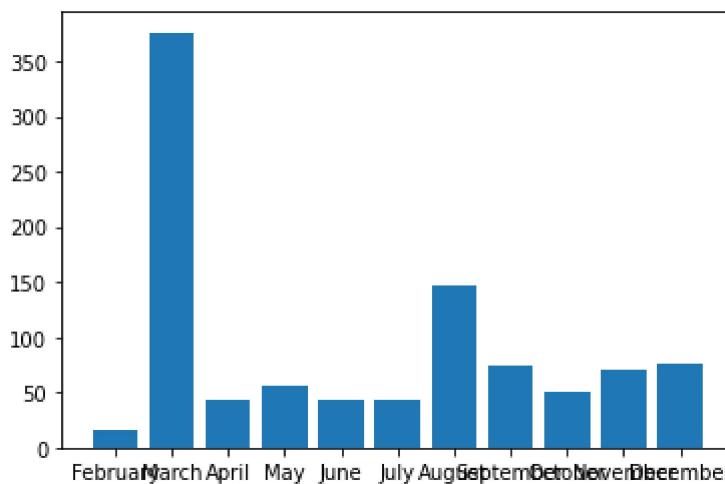
In [209]: █ month\_df = df\_data1.groupby(df\_data1['closed\_at'].dt.month\_name()).count().reset\_index()

Out[209]:

	issue_number	OriginationPhase	DetectionPhase	Category	Priority	Status	created_at
closed_at							
January	NaN	NaN	NaN	NaN	NaN	NaN	NaN
February	16.0	16.0	16.0	16.0	16.0	16.0	16.0
March	376.0	376.0	376.0	376.0	376.0	376.0	376.0
April	44.0	44.0	44.0	44.0	44.0	44.0	44.0
May	56.0	56.0	56.0	56.0	56.0	56.0	56.0
June	44.0	44.0	44.0	44.0	44.0	44.0	44.0
July	43.0	43.0	43.0	43.0	43.0	43.0	43.0
August	147.0	147.0	147.0	147.0	147.0	147.0	147.0
September	74.0	74.0	74.0	74.0	74.0	74.0	74.0
October	51.0	51.0	51.0	51.0	51.0	51.0	51.0
November	70.0	70.0	70.0	70.0	70.0	70.0	70.0
December	75.0	75.0	75.0	75.0	75.0	75.0	75.0

In [210]: █ month\_df['month'] = month\_df.index

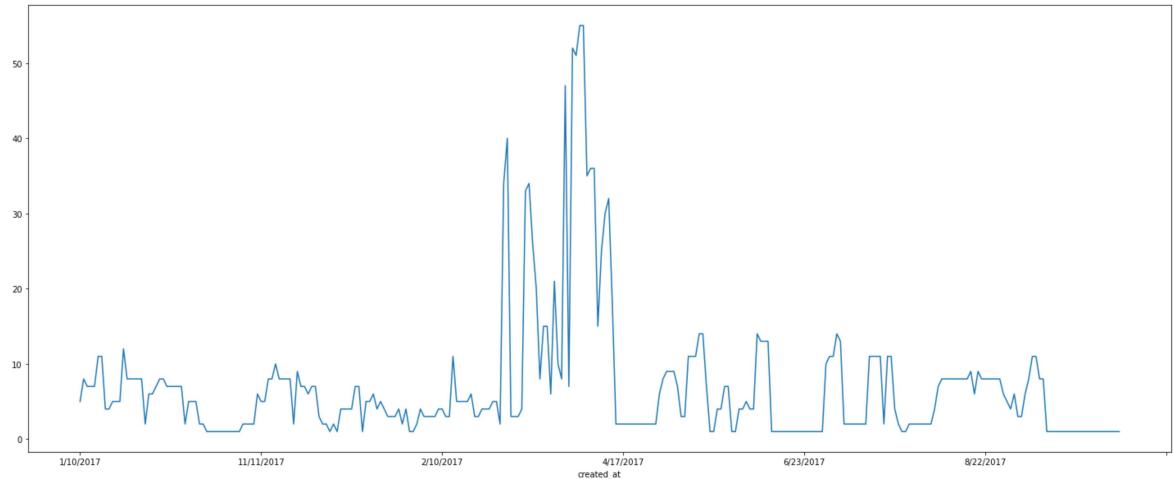
In [211]: █ plt.bar(month\_df['month'],month\_df['closed\_at'])  
plt.show()



In [212]: █ df = pd.read\_csv('issues.csv')

In [213]: ► DailyIssue = df.groupby(['created\_at']).created\_at.count()  
DailyIssue.plot(figsize=(25, 10))

Out[213]: <AxesSubplot:xlabel='created\_at'>



In [214]: ► df1 = df.groupby(['created\_at'], as\_index=False).count()  
dataFrame = df1[['created\_at', 'issue\_number']]  
dataFrame.columns = ['ds', 'y']  
dataFrame  
dataFrame.to\_csv(r'github\_data.csv', index=None, header=True)

In [215]: ► df = pd.read\_csv('github\_data.csv')

In [216]: ► df['ds'] = df['ds'].astype('datetime64[ns]')  
array = df.to\_numpy()  
x = np.array([time.mktime(i[0].timetuple()) for i in array])  
y = np.array([i[1] for i in array])

```
In [217]: ► data = {
    tf.contrib.timeseries.TrainEvalFeatures.TIMES: x,
    tf.contrib.timeseries.TrainEvalFeatures.VALUES: y,
}
print (data)

reader = NumpyReader(data)

train_input_fn = tf.contrib.timeseries.RandomWindowInputFn(reader, batch_size=1)
ar = tf.contrib.timeseries.ARRegressor(
    periodicities=200, input_window_size=30, output_window_size=10,
    num_features=1,
    loss=tf.contrib.timeseries.ARModel.NORMAL_LIKELIHOOD_LOSS)
ar.train(input_fn=train_input_fn, steps=6000)
```

{'times': array([1.4840280e+09, 1.4841144e+09, 1.4842008e+09, 1.4842872e+09,

1.4843736e+09, 1.4844600e+09, 1.4845464e+09, 1.4846328e+09,

1.4847192e+09, 1.4848056e+09, 1.4848920e+09, 1.4849784e+09,

1.4850648e+09, 1.4835960e+09, 1.4836824e+09, 1.4837688e+09,

1.4838552e+09, 1.4839416e+09, 1.5068340e+09, 1.5076116e+09,

1.5076980e+09, 1.5077844e+09, 1.5078708e+09, 1.5079572e+09,

1.5080436e+09, 1.5081300e+09, 1.5082164e+09, 1.5083028e+09,

1.5083892e+09, 1.5069204e+09, 1.5084756e+09, 1.5085620e+09,

1.5086484e+09, 1.5087348e+09, 1.5088212e+09, 1.5089076e+09,

1.5089940e+09, 1.5090804e+09, 1.5091668e+09, 1.5092532e+09,

1.5070068e+09, 1.5093396e+09, 1.5070932e+09, 1.5071796e+09,

1.5072660e+09, 1.5073524e+09, 1.5074388e+09, 1.5075252e+09,

1.5095124e+09, 1.5102936e+09, 1.5103800e+09, 1.5104664e+09,

1.5105528e+09, 1.5106392e+09, 1.5107256e+09, 1.5108120e+09,

1.5108984e+09, 1.5109848e+09, 1.5110712e+09, 1.5095988e+09,

1.5111576e+09, 1.5112440e+09, 1.5113304e+09, 1.5114168e+09,

1.5115032e+09, 1.5115896e+09, 1.5116760e+09, 1.5117624e+09,

1.5118488e+09, 1.5119352e+09, 1.5096852e+09, 1.5120216e+09,

1.5007716e+09, 1.5008500e+09, 1.5009400e+09, 1.5009214e+09]

In [218]: ► evaluation\_input\_fn = tf.contrib.timeseries.WholeDatasetInputFn(reader)  
evaluation = ar.evaluate(input\_fn=evaluation\_input\_fn, steps=1000)

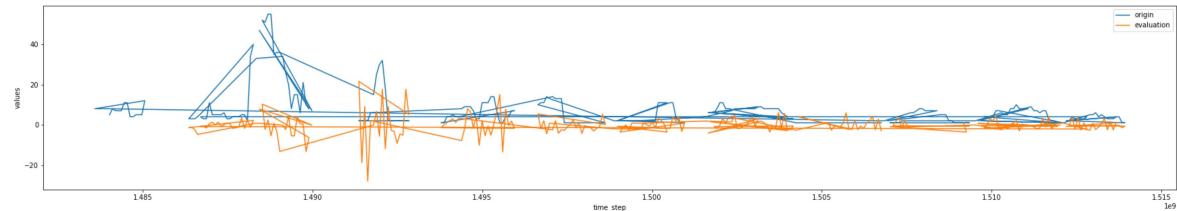
```
INFO:tensorflow:Calling model_fn.
WARNING:tensorflow:Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3B1C908>> could not be transformed and will be executed as-is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH_VERTBOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3B1C908>>: AttributeError: module 'gast' has no attribute 'Index'
WARNING: Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3B1C908>> could not be transformed and will be executed as-is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH_VERTBOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3B1C908>>: AttributeError: module 'gast' has no attribute 'Index'
```

In [219]: ► (predictions,) = tuple(ar.predict(  
input\_fn=tf.contrib.timeseries.predict\_continuation\_input\_fn(  
evaluation, steps=365)))

```
WARNING:tensorflow:Input graph does not use tf.data.Dataset or contain a QueueRunner. That means predict yields forever. This is probably a mistake.
INFO:tensorflow:Calling model_fn.
WARNING:tensorflow:Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3C5F408>> could not be transformed and will be executed as-is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH_VERTBOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3C5F408>>: AttributeError: module 'gast' has no attribute 'Index'
WARNING: Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3C5F408>> could not be transformed and will be executed as-is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH_VERTBOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x0000027DA3C5F408>>: AttributeError: module 'gast' has no attribute 'Index'
INFO:tensorflow:Done calling model_fn.
INFO:tensorflow:Graph was finalized.
INFO:tensorflow:Restoring parameters from C:\Users\mukti\AppData\Local\Temp\tmpojvgx4a0\model.ckpt-0
INFO:tensorflow:Running local_init_op.
INFO:tensorflow:Done running local_init_op.
```

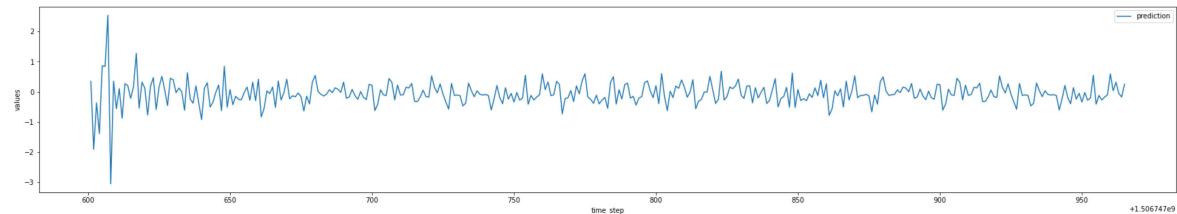
In [220]:

```
plt.figure(figsize=(30, 5))
plt.plot(data['times'].reshape(-1), data['values'].reshape(-1), label='origin')
plt.plot(evaluation['times'].reshape(-1), evaluation['mean'].reshape(-1), label='evaluation')
plt.xlabel('time_step')
plt.ylabel('values')
plt.legend()
plt.show()
```



In [221]:

```
plt.figure(figsize=(30, 5))
plt.plot(predictions['times'].reshape(-1), predictions['mean'].reshape(-1), label='prediction')
plt.xlabel('time_step')
plt.ylabel('values')
plt.legend()
plt.show()
```



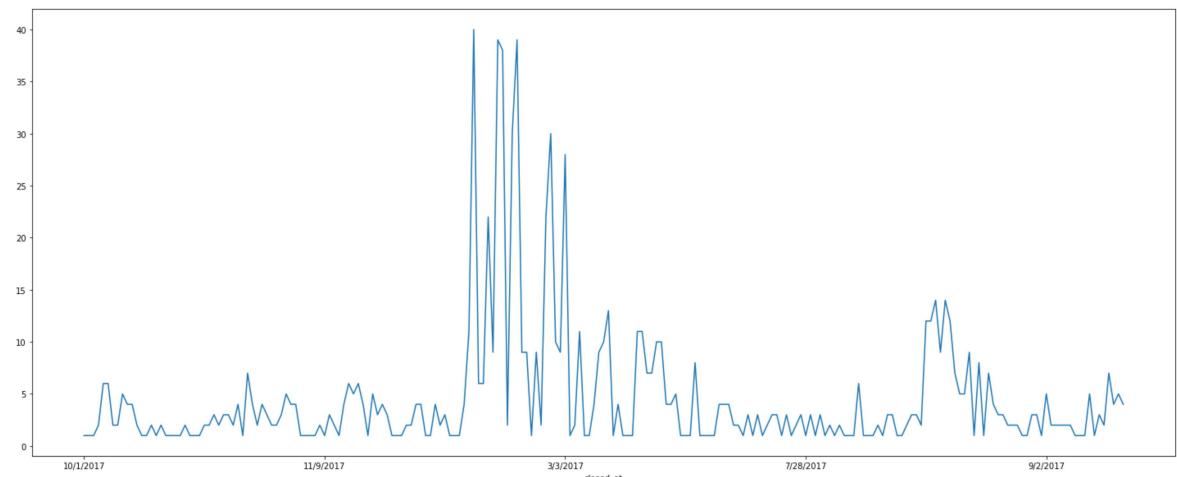
In [222]:

```
df = pd.read_csv('issues.csv')
```

In [223]:

```
DailyIssue = df.groupby(['closed_at']).created_at.count()
DailyIssue.plot(figsize=(25, 10))
```

Out[223]: <AxesSubplot:xlabel='closed\_at'>



```
In [224]: df1 = df.groupby(['closed_at'], as_index = False).count()
dataFrame = df1[['closed_at','issue_number']]
dataFrame.columns = ['ds', 'y']
dataFrame
dataFrame.to_csv (r'github_data.csv', index = None, header=True)
```

```
In [225]: df = pd.read_csv('github_data.csv')
```

```
In [226]: df['ds'] = df['ds'].astype('datetime64[ns]')
array = df.to_numpy()
x = np.array([time.mktime(i[0].timetuple()) for i in array])
y = np.array([i[1] for i in array])
```

```
In [227]: ► data = {
    tf.contrib.timeseries.TrainEvalFeatures.TIMES: x,
    tf.contrib.timeseries.TrainEvalFeatures.VALUES: y,
}
print (data)

reader = NumpyReader(data)

train_input_fn = tf.contrib.timeseries.RandomWindowInputFn(reader, batch_size)
ar = tf.contrib.timeseries.ARRegressor(
    periodicities=200, input_window_size=30, output_window_size=10,
    num_features=1,
    loss=tf.contrib.timeseries.ARModel.NORMAL_LIKELIHOOD_LOSS)
ar.train(input_fn=train_input_fn, steps=6000)
```

```
{'times': array([1.5068340e+09, 1.5076116e+09, 1.5078708e+09, 1.5079572e+09,
```

```
        1.5080436e+09, 1.5083028e+09, 1.5083892e+09, 1.5069204e+09,
        1.5084756e+09, 1.5085620e+09, 1.5086484e+09, 1.5087348e+09,
        1.5088212e+09, 1.5089076e+09, 1.5089940e+09, 1.5090804e+09,
        1.5091668e+09, 1.5092532e+09, 1.5070068e+09, 1.5093396e+09,
        1.5071796e+09, 1.5072660e+09, 1.5073524e+09, 1.5074388e+09,
        1.5102936e+09, 1.5103800e+09, 1.5104664e+09, 1.5105528e+09,
        1.5106392e+09, 1.5107256e+09, 1.5108120e+09, 1.5108984e+09,
        1.5110712e+09, 1.5095988e+09, 1.5111576e+09, 1.5112440e+09,
        1.5113304e+09, 1.5114168e+09, 1.5115032e+09, 1.5115896e+09,
        1.5116760e+09, 1.5117624e+09, 1.5118488e+09, 1.5119352e+09,
        1.5120216e+09, 1.5097716e+09, 1.5098580e+09, 1.5099480e+09,
        1.5100344e+09, 1.5101208e+09, 1.5102072e+09, 1.5121080e+09,
        1.5128856e+09, 1.5129720e+09, 1.5130584e+09, 1.5131448e+09,
        1.5132312e+09, 1.5133176e+09, 1.5134040e+09, 1.5134904e+09,
        1.5135768e+09, 1.5136632e+09, 1.5121944e+09, 1.5137496e+09,
        1.5138360e+09, 1.5139224e+09, 1.5140088e+09, 1.5140952e+09,
        1.5141816e+09, 1.5142680e+09, 1.5143544e+09, 1.5122808e+09,
        1.5123672e+09, 1.5124536e+09, 1.5125400e+09, 1.5126264e+09,
        1.5127128e+09, 1.5127992e+09, 1.4868792e+09, 1.4871384e+09,
        1.4873976e+09, 1.4891256e+09, 1.4892120e+09, 1.4892984e+09,
        1.4893812e+09, 1.4894676e+09, 1.4895540e+09, 1.4896404e+09,
        1.4897268e+09, 1.4898132e+09, 1.4898996e+09, 1.4899860e+09,
        1.4900724e+09, 1.4901588e+09, 1.4902452e+09, 1.4903316e+09,
        1.4904180e+09, 1.4905044e+09, 1.4906772e+09, 1.4907636e+09,
        1.4885208e+09, 1.4908500e+09, 1.4886072e+09, 1.4888664e+09,
        1.4889528e+09, 1.4890392e+09, 1.4918004e+09, 1.4919732e+09,
        1.4920596e+09, 1.4921460e+09, 1.4911092e+09, 1.4911956e+09,
        1.4913684e+09, 1.4914548e+09, 1.4917140e+09, 1.4946516e+09,
        1.4947380e+09, 1.4952564e+09, 1.4953428e+09, 1.4956884e+09,
        1.4957748e+09, 1.4971572e+09, 1.4972436e+09, 1.4974164e+09,
        1.4978484e+09, 1.4979348e+09, 1.4981076e+09, 1.4981940e+09,
        1.4982804e+09, 1.4984532e+09, 1.4986260e+09, 1.4987124e+09,
        1.4964660e+09, 1.4966388e+09, 1.4967252e+09, 1.4968980e+09,
        1.4969844e+09, 1.4996628e+09, 1.4998356e+09, 1.4999220e+09,
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        1.5004404e+09, 1.4989716e+09, 1.5006132e+09, 1.5006996e+09,
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        1.4990580e+09, 1.5013908e+09, 1.5014772e+09, 1.4992308e+09,
        1.4993172e+09, 1.4994036e+09, 1.4994900e+09, 1.4995764e+09,
```

```

1.5015636e+09, 1.5023412e+09, 1.5024276e+09, 1.5026004e+09,
1.5026868e+09, 1.5027732e+09, 1.5028596e+09, 1.5029460e+09,
1.5030324e+09, 1.5031188e+09, 1.5016500e+09, 1.5032052e+09,
1.5032916e+09, 1.5033780e+09, 1.5034644e+09, 1.5035508e+09,
1.5036372e+09, 1.5037236e+09, 1.5038100e+09, 1.5038964e+09,
1.5039828e+09, 1.5017364e+09, 1.5040692e+09, 1.5041556e+09,
1.5018228e+09, 1.5019092e+09, 1.5020820e+09, 1.5021684e+09,
1.5022548e+09, 1.5042420e+09, 1.5050196e+09, 1.5051060e+09,
1.5051924e+09, 1.5052788e+09, 1.5053652e+09, 1.5054516e+09,
1.5055380e+09, 1.5056244e+09, 1.5057108e+09, 1.5057972e+09,
1.5043284e+09, 1.5058836e+09, 1.5059700e+09, 1.5060564e+09,
1.5061428e+09, 1.5064020e+09, 1.5064884e+09, 1.5065748e+09,
1.5066612e+09, 1.5044148e+09, 1.5067476e+09, 1.5045012e+09,
1.5045876e+09, 1.5046740e+09, 1.5047604e+09, 1.5048468e+09,
1.5049332e+09]), 'values': array([ 1, 1, 1, 2, 6, 6, 2, 2,
5, 4, 2, 1, 1, 2, 1, 2,
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2, 4, 4, 1, 1, 4, 2, 3, 1, 1, 1, 4, 11, 40, 6, 6, 22,
9, 39, 38, 2, 30, 39, 9, 9, 1, 9, 2, 22, 30, 10, 9, 28, 1,
2, 11, 1, 1, 4, 9, 10, 13, 1, 4, 1, 1, 1, 1, 11, 11, 7, 7,
10, 10, 4, 4, 5, 1, 1, 1, 8, 1, 1, 1, 1, 4, 4, 4, 2,
2, 1, 3, 1, 3, 1, 2, 3, 3, 1, 3, 1, 2, 3, 1, 3, 1,
3, 1, 2, 1, 2, 1, 1, 1, 6, 1, 1, 1, 2, 1, 3, 3, 1,
1, 2, 3, 3, 2, 12, 12, 14, 9, 14, 12, 7, 5, 5, 9, 1, 8,
1, 7, 4, 3, 3, 2, 2, 2, 1, 1, 3, 3, 1, 5, 2, 2, 2,
2, 2, 1, 1, 5, 1, 3, 2, 7, 4, 5, 4])}

```

INFO:tensorflow:Using default config.

WARNING:tensorflow:Using temporary folder as model directory: C:\Users\mukti\AppData\Local\Temp\tmpg6fncaj6

INFO:tensorflow:Using config: {'\_model\_dir': 'C:\Users\mukti\AppData\Local\Temp\tmpg6fncaj6', '\_tf\_random\_seed': None, '\_save\_summary\_steps': 100, '\_save\_checkpoints\_steps': None, '\_save\_checkpoints\_secs': 600, '\_session\_config': allow\_soft\_placement: true}

graph\_options {

```

    rewrite_options {
        meta_optimizer_iterations: ONE
    }
}
, '_keep_checkpoint_max': 5, '_keep_checkpoint_every_n_hours': 10000, '_log_step_count_steps': 100, '_train_distribute': None, '_device_fn': None, '_protocol': None, '_eval_distribute': None, '_experimental_distribute': None, '_experimental_max_worker_delay_secs': None, '_service': None, '_cluster_spec': <tensorflow.python.training.server_lib.ClusterSpec object at 0x0000027DA8866508>, '_task_type': 'worker', '_task_id': 0, '_global_id_in_cluster': 0, '_master': '', '_evaluation_master': '', '_is_chief': True, '_num_ps_replicas': 0, '_num_worker_replicas': 1}

```

INFO:tensorflow:Calling model\_fn.

WARNING:tensorflow:Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar\_model.FlatPredictionModel object at 0x0000027DA841BF48>> could not be transformed and will be executed as -is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERTOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar\_model.FlatPredictionModel object at 0x0000027DA841BF48>>: AttributeError: module 'gast' has no att

```
ribute 'Index'
WARNING: Entity <bound method FlatPredictionModel.call of <tensorflow.contr
ib.timeseries.python.timeseries.ar_model.FlatPredictionModel object at 0x00
00027DA841BF48>> could not be transformed and will be executed as-is. Pleas
e report this to the Autograph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH_VERTOSITY=10` ) and attach the full out
put. Cause: converting <bound method FlatPredictionModel.call of <tensorflow
w.contrib.timeseries.python.timeseries.ar_model.FlatPredictionModel object
at 0x0000027DA841BF48>>: AttributeError: module 'gast' has no attribute 'In
dex'
INFO:tensorflow:Done calling model_fn.
INFO:tensorflow>Create CheckpointSaverHook.
INFO:tensorflow:Graph was finalized.
INFO:tensorflow:Running local_init_op.
INFO:tensorflow:Done running local_init_op.
INFO:tensorflow:Saving checkpoints for 0 into C:\Users\mukti\AppData\Local
\Temp\tmpg6fncaj6\model.ckpt.
WARNING:tensorflow:Training with estimator made no steps. Perhaps input is
empty or misspecified.
INFO:tensorflow:Loss for final step: None.
```

Out[227]: <tensorflow.contrib.timeseries.python.timeseries.estimators.ARRegressor at 0x27da8866188>

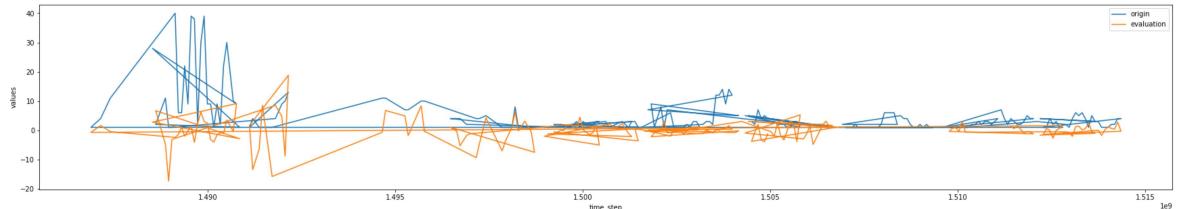
In [228]: ► evaluation\_input\_fn = tf.contrib.timeseries.WholeDatasetInputFn(reader)
evaluation = ar.evaluate(input\_fn=evaluation\_input\_fn, steps=1000)

```
[7.18067884e-01]
[6.54366076e-01]
[3.89410198e-01]
[4.45490509e-01]
[1.12565435e-01]
[6.64348304e-01]
[2.07697138e-01]
[9.29898643e+00]
[6.55910254e-01]
[7.39690900e-01]
[1.06588328e+00]
[1.05180979e+00]
[4.73423958e-01]
[1.30453944e-01]
[1.04467086e-01]
[4.41113323e-01]
[1.81052983e-01]
[9.70028973e+00]
[8.45332336e+00]
[7.83878803e-01]
```

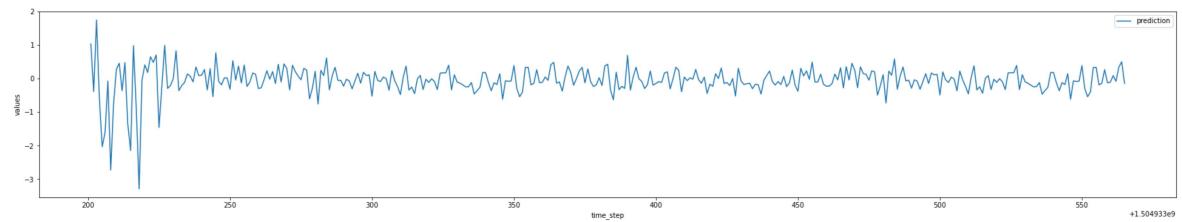
```
In [229]: ┌ predictions,) = tuple(ar.predict(
    input_fn=tf.contrib.timeseries.predict_continuation_input_fn(
        evaluation, steps=365)))
```

WARNING:tensorflow:Input graph does not use tf.data.Dataset or contain a QueueRunner. That means predict yields forever. This is probably a mistake.  
INFO:tensorflow:Calling model\_fn.  
WARNING:tensorflow:Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar\_model.FlatPredictionModel object at 0x0000027DA9007408>> could not be transformed and will be executed as -is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERTOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar\_model.FlatPredictionModel object at 0x0000027DA9007408>>: AttributeError: module 'gast' has no attribute 'Index'  
WARNING: Entity <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar\_model.FlatPredictionModel object at 0x0000027DA9007408>> could not be transformed and will be executed as-is. Please report this to the AutoGraph team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERTOSITY=10`) and attach the full output. Cause: converting <bound method FlatPredictionModel.call of <tensorflow.contrib.timeseries.python.timeseries.ar\_model.FlatPredictionModel object at 0x0000027DA9007408>>: AttributeError: module 'gast' has no attribute 'Index'  
INFO:tensorflow:Done calling model\_fn.  
INFO:tensorflow:Graph was finalized.  
INFO:tensorflow:Restoring parameters from C:\Users\mukti\AppData\Local\Temp\tmpg6fncaj6\model.ckpt-0  
INFO:tensorflow:Running local\_init\_op.  
INFO:tensorflow:Done running local\_init\_op.

```
In [230]: ┌ plt.figure(figsize=(30, 5))
plt.plot(data['times'].reshape(-1), data['values'].reshape(-1), label='origin')
plt.plot(evaluation['times'].reshape(-1), evaluation['mean'].reshape(-1), label='evaluation')
plt.xlabel('time_step')
plt.ylabel('values')
plt.legend()
plt.show()
```



```
In [231]: ► plt.figure(figsize=(30, 5))
plt.plot(predictions['times'].reshape(-1), predictions['mean'].reshape(-1),
plt.xlabel('time_step')
plt.ylabel('values')
plt.legend()
plt.show()
```



```
In [ ]: ►
```