

Filename: MA_pandas.py

Line #	Mem usage	Increment	Occurrences	Line Contents
17	129.0 MiB	129.0 MiB	1	@profile
18				def my_func():
19				#time and memory
20	129.0 MiB	0.0 MiB	1	start = time.time()
21	129.0 MiB	0.0 MiB	1	tracemalloc.start()
22				#loading dataset
23	136.8 MiB	7.8 MiB	1	df =
24	136.9 MiB	0.1 MiB	1	pd.DataFrame(np.load('C:/Users/Mriank Ghosh/Desktop/shell/dataset/MA_1m.npy'),
25				columns = ['data'])
26	136.9 MiB	0.0 MiB	1	X = df["data"]
27	136.9 MiB	0.0 MiB	1	# split dataset
28				train_size = int(len(X) * 0.80)
29				train, test = X[0:train_size],
30				X[train_size:len(X)]
31				#1
32				iteration*****
33				# train autoregression
34	162.4 MiB	25.5 MiB	1	model = ARIMA(train, order=(0,
35				0, 1))
36	1064.4 MiB	902.0 MiB	1	model_fit = model.fit()
37	1069.2 MiB	4.8 MiB	1	predictions =
38				model_fit.predict(start=len(train), end=len(train)+len(test)-1, dynamic=False)
39				#test accuracy
40	1069.2 MiB	0.0 MiB	1	error1 =
41				mean_squared_error(test, predictions)
42	1069.2 MiB	0.0 MiB	1	print(error1)
43				#metrics
44	1069.2 MiB	0.0 MiB	1	end = time.time()
45	1069.2 MiB	0.0 MiB	1	t1=end-start
46				m1=tracemalloc.get_traced_memory()
47	1069.2 MiB	0.0 MiB	1	d1=m1[1]-m1[0]
48	1069.2 MiB	0.0 MiB	1	print("The time of execution of
49				above program is :", t1/60)
50	1069.2 MiB	0.0 MiB	1	print("(current memory usage)
51				:",m1[0]/1000000)
52	1069.2 MiB	0.0 MiB	1	print("(peak memory usage)
53				:",m1[1]/1000000)
54	1069.2 MiB	0.0 MiB	1	print("(memory usage)
55				:",d1/1000000)
56	1069.2 MiB	0.0 MiB	1	tracemalloc.stop()