

HW7 報告 110705017 何翊華

Parameters for the genetic algorithm:

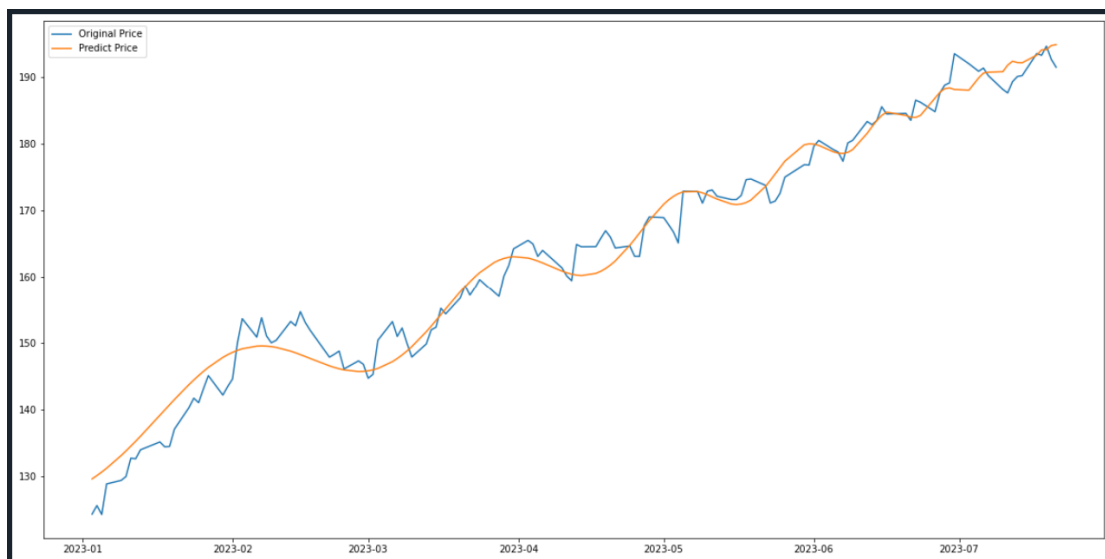
```
# Initialize  
N = 10000 # population  
G = 5 # generation  
s = 0.05 # survival_rate  
m = 0.01 # mutation_rate  
n = 138 # time interval  
survive = round(N*s)  
mutate = round(N*m)
```

Optimal parameters & MSE:

```
A: 5.277225858110954  
B: -0.001619861145668504  
C: 0.12662365798888436  
tc: 2023-07-24  
w: 16.62  
fi: 5.6  
beta: 1.023
```

```
MSE: 8.699443296185182
```

Suppose tc in range 2023/7/24 – 2023/8/4:



藍線為真實價格，橘色為預測價格