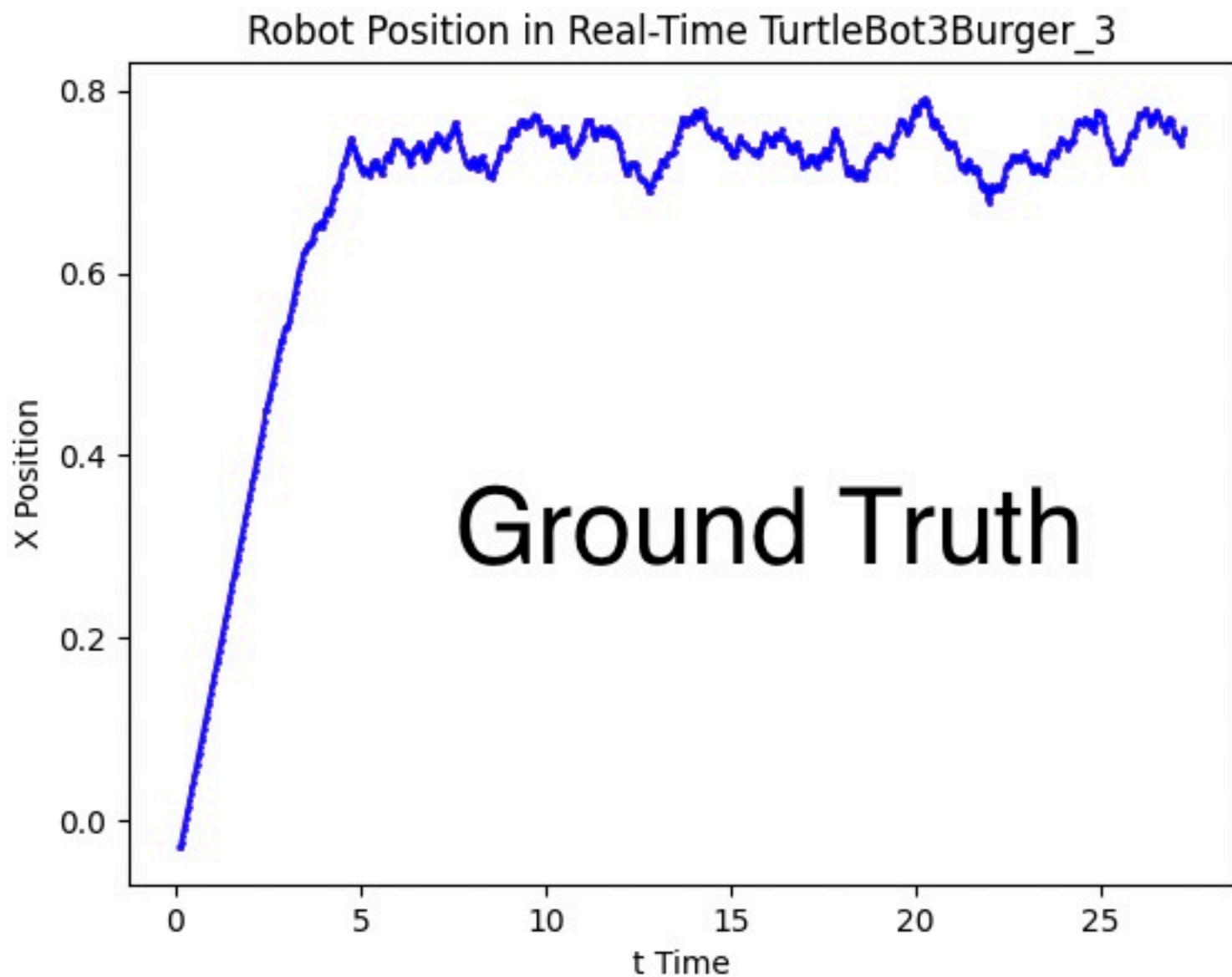


Figure 1



data_log.csv

environment.yml

LICENSE

log_data_20241110231101.csv

logging

README.md

requirements.txt

sara.ipynb

testing.py

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self.robot_position["dirty_x"] = kalman_filter_2x2((self.robot_

self.robot_position["dirty_x"] = (self.robot_position["clean_x"]

#! DISTURBANCE 2

#! DISTURBANCE 2

#! DISTURBANCE 2

#! DISTURBANCE 2

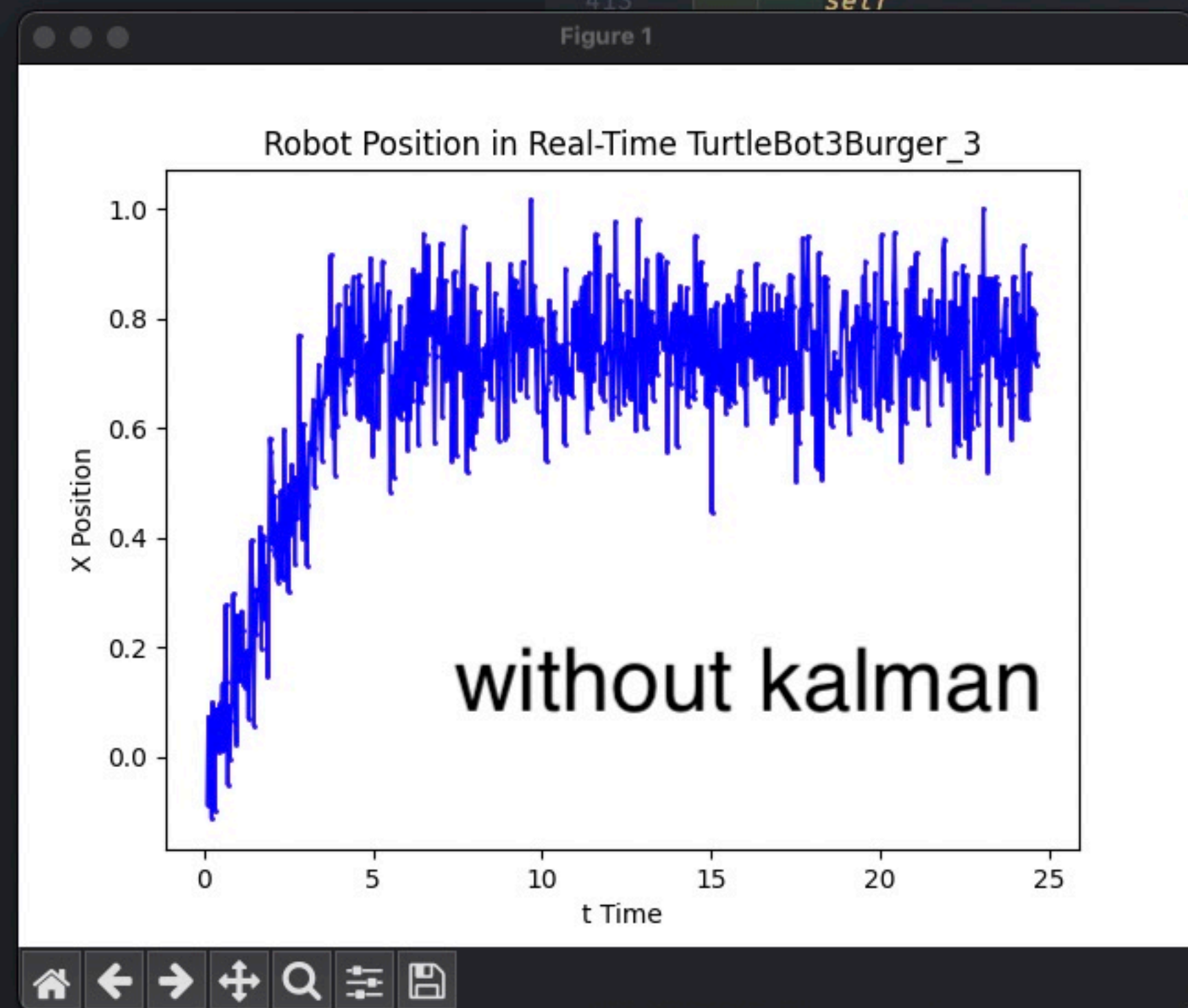
def run_odometry_service(self):

self

[localisation] (TurtleBot3Bur

WARNING: Robot "TurtleBot3E

WARNING: Robot "TurtleBot3E



etty_position())

on["dirty_x"], self.robot_position["y"], c

self.robot.getTime()

y_o1()

ONSOLE

TERMINAL

data_log.csv
environment.yml
LICENSE
log_data_20241110231101.csv
logging
README.md
requirements.txt
sara.ipynb
testing.py

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U
U
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U
M
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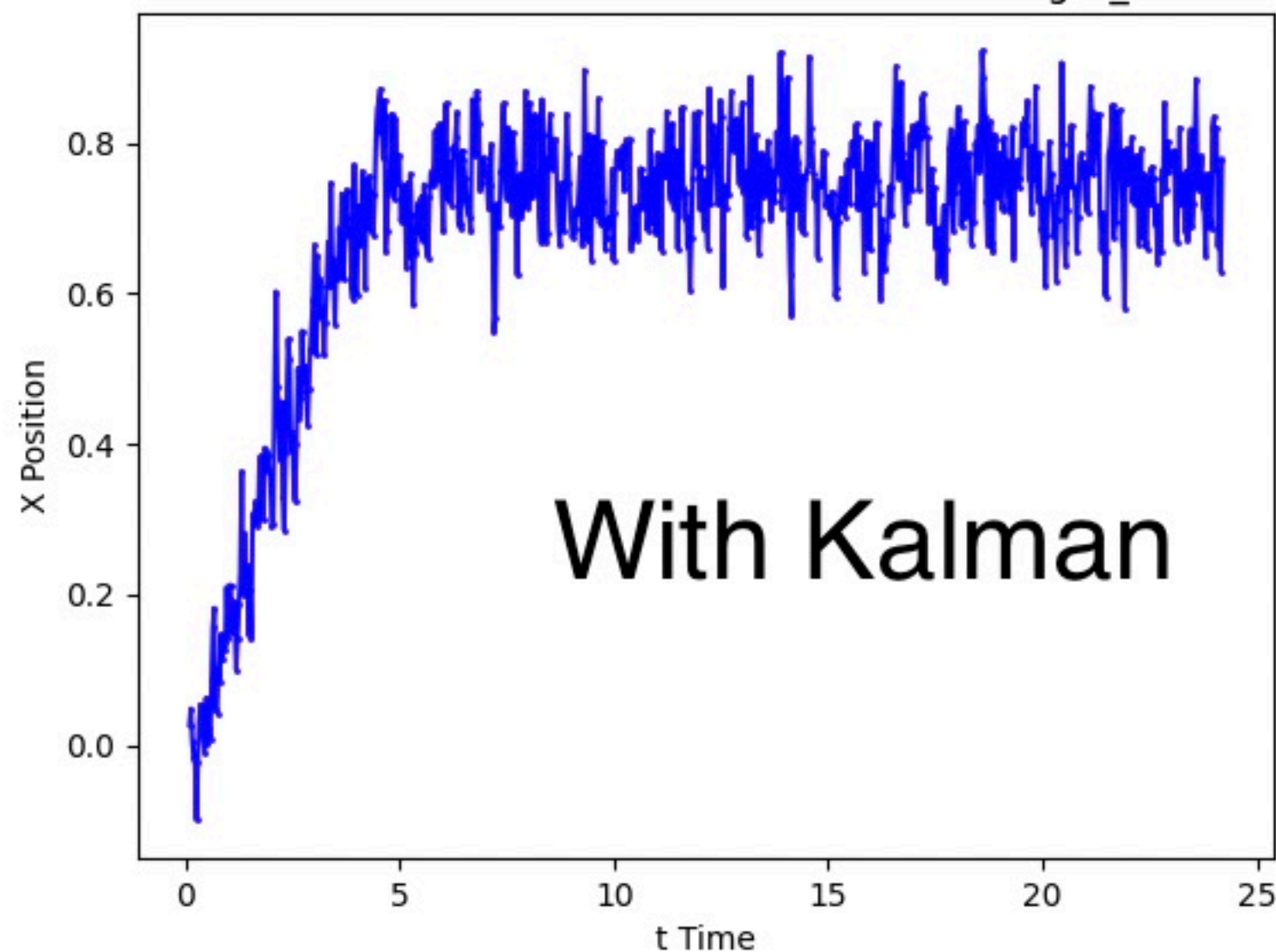
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```
mean = 0  
std_dev = 0.75  
self.robot_position["dirty_x"] = kalman_filter_2x2((self.robot_po  
# self.robot_position["dirty_x"] = (self.robot_position["clean_x"  
#!/ DISTURBANCE 2  
#!/ DISTURBANCE 2  
#!/ DISTURBANCE 2  
#!/ DISTURBANCE 2  
  
def run_odometry_service(self):  
    self
```

```
estimated: 0.6896594  
estimated: 0.7202315  
estimated: 0.8110343  
estimated: 0.8854838  
estimated: 0.7674923  
estimated: 0.7801066  
estimated: 0.7398863  
estimated: 0.7595339  
estimated: 0.7831434  
estimated: 0.7170869  
estimated: 0.7472278  
estimated: 0.7072302  
estimated: 0.6512305  
estimated: 0.7591478  
estimated: 0.7380781  
estimated: 0.6977042  
estimated: 0.6857713  
estimated: 0.8199808  
estimated: 0.8349720  
estimated: 0.7673089  
estimated: 0.8202574  
estimated: 0.6616879  
estimated: 0.7254962  
estimated: 0.6291562  
estimated: 0.7795434  
estimated: 0.7595397
```

Figure 1

Robot Position in Real-Time TurtleBot3Burger_3



```
etty_position())  
on["dirty_x"], self.robot_position["y"], c  
self.robot.getTime()  
y_o1()
```

CONSOLE

TERMINAL