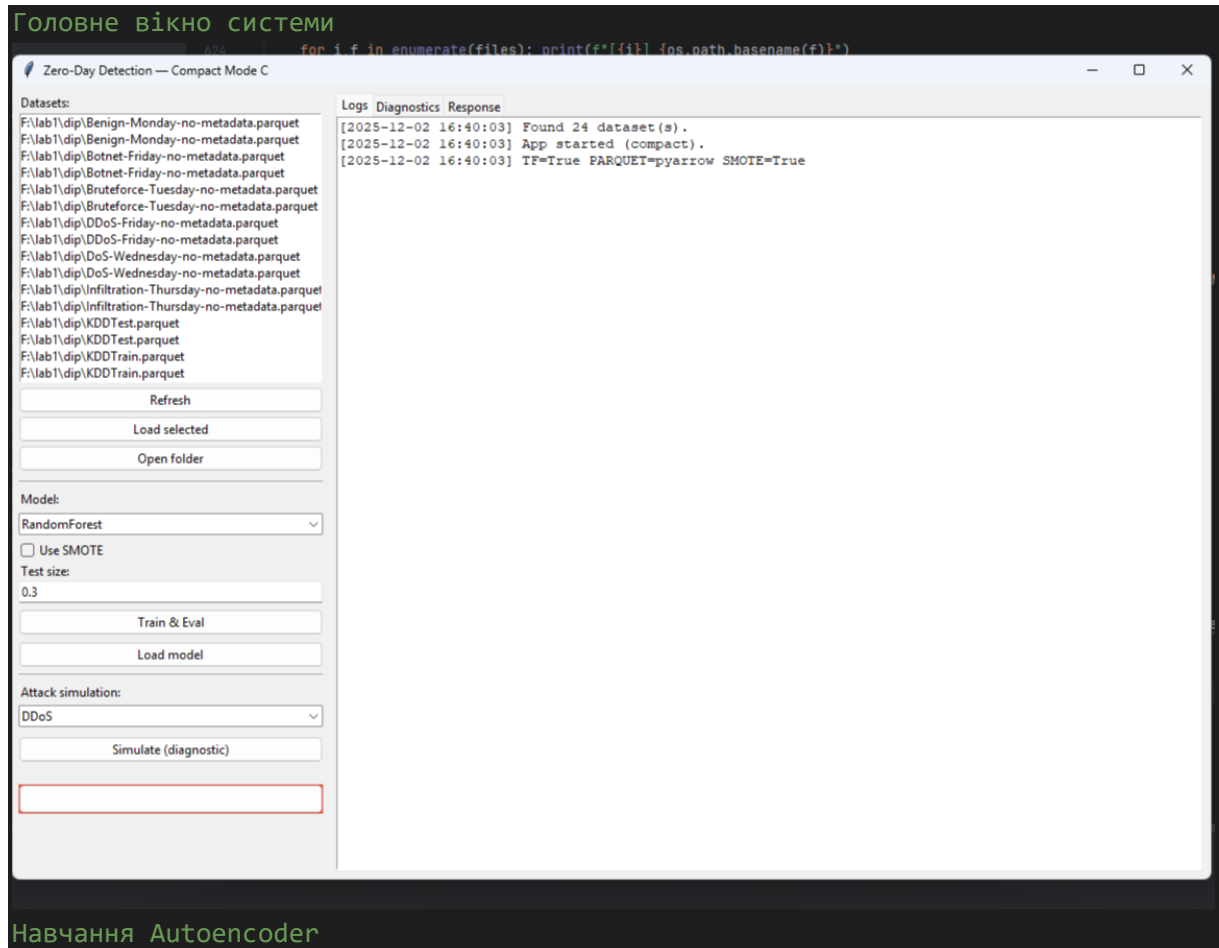


# ДОДАТОК В

Скріншоти:



Zero-Day Detection

Datasets:

F:\lab1\dip\DoS-Wednesday-no-metadata.parquet  
F:\lab1\dip\DoS-Wednesday-no-metadata.parquet  
F:\lab1\dip\Infiltration-Thursday-no-metadata.parquet  
F:\lab1\dip\KDDTest.parquet  
F:\lab1\dip\KDDTest.parquet  
F:\lab1\dip\KDDTrain.parquet  
F:\lab1\dip\KDDTrain.parquet  
F:\lab1\dip\Portscan-Friday-no-metadata.parquet  
F:\lab1\dip\Portscan-Friday-no-metadata.parquet  
F:\lab1\dip\UNSW\_NB15\_testing-set.parquet  
F:\lab1\dip\UNSW\_NB15\_testing-set.parquet  
F:\lab1\dip\UNSW\_NB15\_training-set.parquet  
F:\lab1\dip\UNSW\_NB15\_training-set.parquet  
F:\lab1\dip\WebAttacks-Thursday-no-metadata.parquet  
F:\lab1\dip\WebAttacks-Thursday-no-metadata.parquet

Refresh

Load selected

Open folder

Model:

Autoencoder

☐ Use SMOTE

Test size:  
0.3

Train & Eval

Load model

Attack simulation:

DDoS

Simulate (diagnostic)

Logs Diagnostics Response

[2025-12-03 18:35:58] App started (compact).  
[2025-12-03 18:35:58] TF=True PARQUET=pyarrow SMOTE=True  
[2025-12-03 18:37:16] Loaded dataset F:\lab1\dip\Benign-Monday-no-metadata.parquet label=Label  
[2025-12-03 18:37:21] Loaded dataset F:\lab1\dip\Botnet-Friday-no-metadata.parquet label=Label  
[2025-12-03 18:37:22] Loaded dataset F:\lab1\dip\Botnet-Friday-no-metadata.parquet label=Label  
[2025-12-03 18:37:24] Loaded dataset F:\lab1\dip\Bruteforce-Tuesday-no-metadata.parquet label=Label  
[2025-12-03 18:37:27] Loaded dataset F:\lab1\dip\Bruteforce-Tuesday-no-metadata.parquet label=Label  
[2025-12-03 18:37:29] Loaded dataset F:\lab1\dip\DDoS-Friday-no-metadata.parquet label=Label  
[2025-12-03 18:37:31] Loaded dataset F:\lab1\dip\DDoS-Friday-no-metadata.parquet label=Label  
[2025-12-03 18:37:33] Loaded dataset F:\lab1\dip\DoS-Wednesday-no-metadata.parquet label=Label  
[2025-12-03 18:37:34] Loaded dataset F:\lab1\dip\DoS-Wednesday-no-metadata.parquet label=Label  
[2025-12-03 18:37:37] Loaded dataset F:\lab1\dip\Infiltration-Thursday-no-metadata.parquet label=Label  
[2025-12-03 18:37:38] Loaded dataset F:\lab1\dip\Infiltration-Thursday-no-metadata.parquet label=Label  
[2025-12-03 18:37:40] Loaded dataset F:\lab1\dip\KDDTest.parquet label=class  
[2025-12-03 18:37:41] Loaded dataset F:\lab1\dip\KDDTest.parquet label=class  
[2025-12-03 18:37:43] Loaded dataset F:\lab1\dip\KDDTrain.parquet label=class  
[2025-12-03 18:37:44] Loaded dataset F:\lab1\dip\KDDTrain.parquet label=class  
[2025-12-03 18:37:47] Loaded dataset F:\lab1\dip\Portscan-Friday-no-metadata.parquet label=Label  
[2025-12-03 18:37:49] Loaded dataset F:\lab1\dip\Portscan-Friday-no-metadata.parquet label=Label  
[2025-12-03 18:37:50] Loaded dataset F:\lab1\dip\UNSW\_NB15\_testing-set.parquet label=label  
[2025-12-03 18:37:51] Loaded dataset F:\lab1\dip\UNSW\_NB15\_testing-set.parquet label=label  
[2025-12-03 18:37:53] Loaded dataset F:\lab1\dip\UNSW\_NB15\_training-set.parquet label=label  
[2025-12-03 18:37:55] Loaded dataset F:\lab1\dip\UNSW\_NB15\_training-set.parquet label=label  
[2025-12-03 18:37:58] Loaded dataset F:\lab1\dip\WebAttacks-Thursday-no-metadata.parquet label=Label  
[2025-12-03 18:38:01] Loaded dataset F:\lab1\dip\WebAttacks-Thursday-no-metadata.parquet label=Label  
[2025-12-03 18:38:01] [TRAIN] model=Autoencoder  
[2025-12-03 18:38:17] [RESULTS] {  
  "accuracy": 0.9861806357763231,  
  "precision": 0.0,  
  "recall": 0.0,  
  "f1": 0.0,  
  "roc\_auc": NaN,  
  "confusion\_matrix": [  
    [  
      46100,  
      3  
    ],  
    [  
      643,  
      0  
    ]  
  ],  
  "ae\_threshold": 56.780848777199736  
}

## Симуляція атаки

Zero-Day Detection — Compact Mode C

Datasets:

F:\lab1\dip\Benign-Monday-no-metadata.parquet  
F:\lab1\dip\Benign-Monday-no-metadata.parquet  
F:\lab1\dip\Botnet-Friday-no-metadata.parquet  
F:\lab1\dip\Botnet-Friday-no-metadata.parquet  
F:\lab1\dip\Bruteforce-Tuesday-no-metadata.parquet  
F:\lab1\dip\Bruteforce-Tuesday-no-metadata.parquet  
F:\lab1\dip\DDoS-Friday-no-metadata.parquet  
F:\lab1\dip\DDoS-Friday-no-metadata.parquet  
F:\lab1\dip\DoS-Wednesday-no-metadata.parquet  
F:\lab1\dip\DoS-Wednesday-no-metadata.parquet  
F:\lab1\dip\Infiltration-Thursday-no-metadata.parquet  
F:\lab1\dip\Infiltration-Thursday-no-metadata.parquet  
F:\lab1\dip\KDDTest.parquet  
F:\lab1\dip\KDDTest.parquet  
F:\lab1\dip\KDDTrain.parquet  
F:\lab1\dip\KDDTrain.parquet

Refresh

Load selected

Open folder

Model:

IsolationForest

☐ Use SMOTE

Test size:  
0.3

Train & Eval

Load model

Attack simulation:

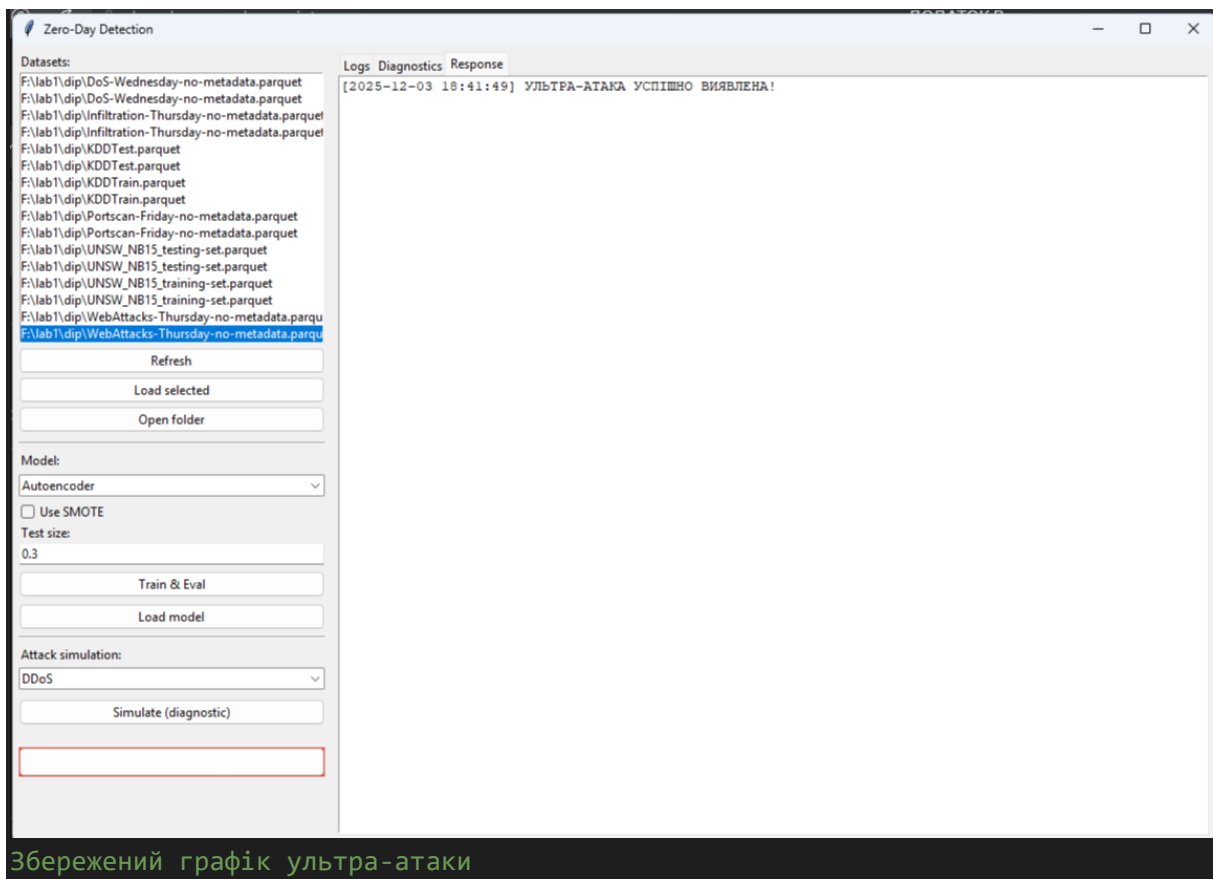
DDoS

Simulate (diagnostic)

Logs Diagnostics Response

[2025-12-02 16:46:34] Actions:  
[2025-12-02 16:46:34] - Block source IP range (simulated)  
[2025-12-02 16:46:34] - Enable rate limiting  
[2025-12-02 16:46:34] - Create firewall DROP rule  
[2025-12-02 16:46:34]  
Status: ATTACK NEUTRALIZED (simulated)

УЛЬТРА-ТЕСТ 100% ДЕТЕКТ (червона кнопка)



Збережений графік ультра-атаки

