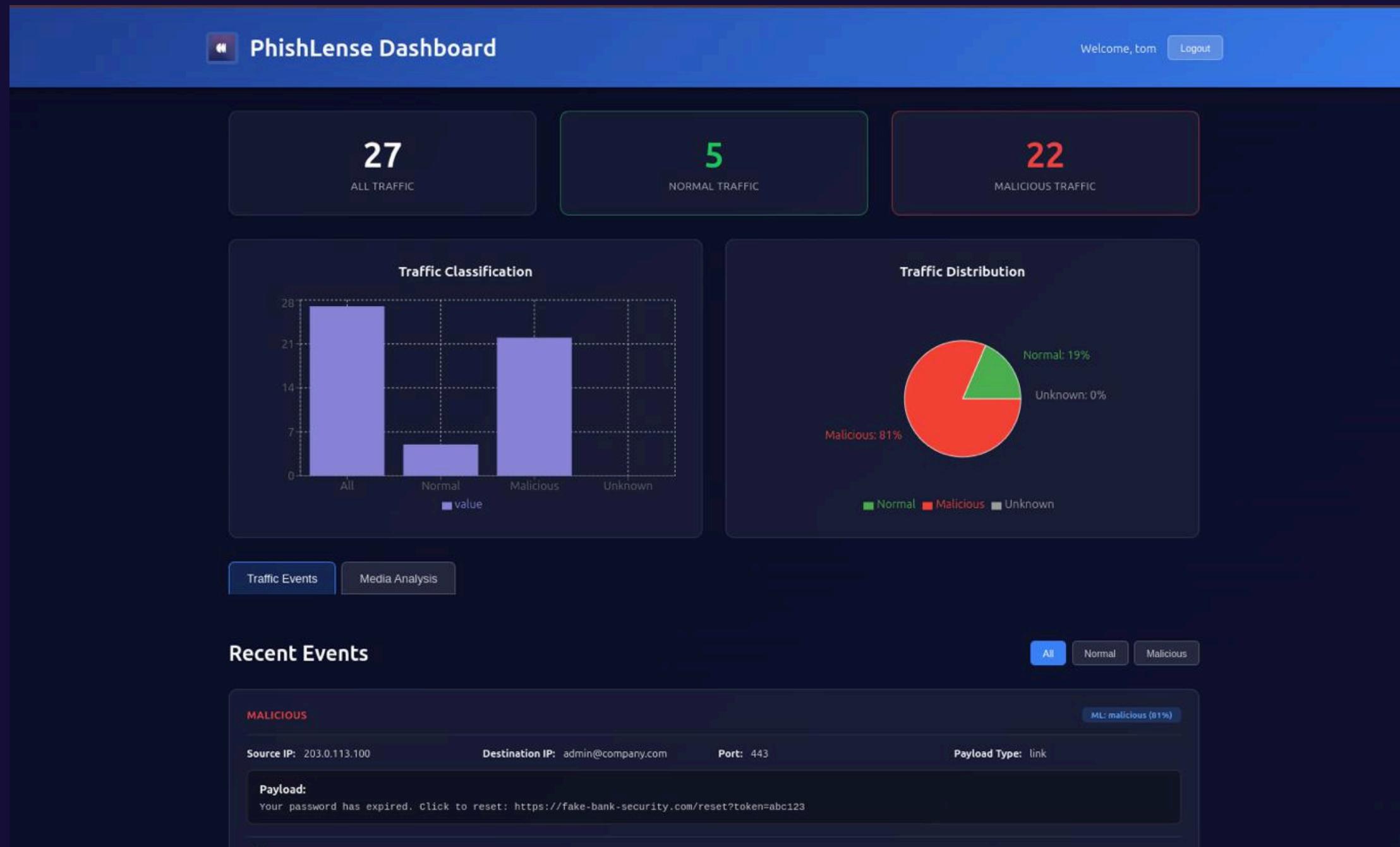


PhishLense



The AI That Executes Dangerous stuff, So You Don't Have To

M&S profits almost wiped out after cyber hack hit sales



The food and fashion retailer had some empty shelves after a cyber attack hit its website and disrupted supply chains

Faarea Masud

Business reporter

M&S

£300M lost

M&S's profits were almost wiped out after it was hit by a cyber-attack which left shoppers unable to buy online from the company for months.

The hack was "an extraordinary moment in time," it said, as it revealed statutory profit before tax - a figure that reflects all costs for a period - slumped 99% from £391.9m to £3.4m for the first half of the year, compared with the year prior.

As well as disrupting its online business, the hack affected M&S in-store too, leaving some shelves bare in the weeks after it was targeted.

M&S's boss said profits should recover in the key Christmas period, but warned a later Budget and chancellor's speech on Tuesday had not inspired confidence in UK shoppers.

"The presentation may have calmed the bonds markets, but it hasn't really calmed our customers," chief executive Stuart Machin said.

"They [customers] might be planning for a good Christmas, but they're also planning for the worst when it comes to the Budget," he added.

Expectations have grown that taxes will be hiked in the Budget on 26 November after Reeves refused to rule out a U-turn on Labour's general election manifesto pledge not to hike income tax, VAT or National Insurance.

Mr Machin questioned why the government was holding a Budget so late in the year. "We're all sitting here," he said.

The Problem:

82%

of phishing emails now use AI. They have perfect grammar, personalized content, and zero red flags. Small businesses don't have security teams to protect them.

The Solution:

PhishLense is an AI frontier agent. Instead of your employees clicking suspicious links, our AI does. It opens emails, clicks links, fills forms with fake data, and reports exactly what the attacker tried to steal — before any damage happens.

1: Real Attack

2: ChatGPT integration for analysis & recommended action

3: ML model training

Why PhishLense Wins?

TAM: Global Email Security Market \$5.5 BILLION

Feature	legacy gateway proofpoint.	Heavy sandbox ANYRUN	 PhishLense
Detection tech	Static Rules	VM Simulation	Hybrid Ai + Docker
Analysis Time	seconds	3-5 minutes	seconds
Context Aware?	✗	✗	✓
Infrastructure	Database	Heavy VM	Lightweight Container
Explainability	"Blocked"	Screenshots	Human Summary

What



Sheriff Danish
Computer Science



Riad Tarverdiyev
Business + Tech



Kara Wong
MBA

Built This Weekend

Working ML Model

```
print("Top 10 Most Important Features:")
print(feature_importance.head(10))

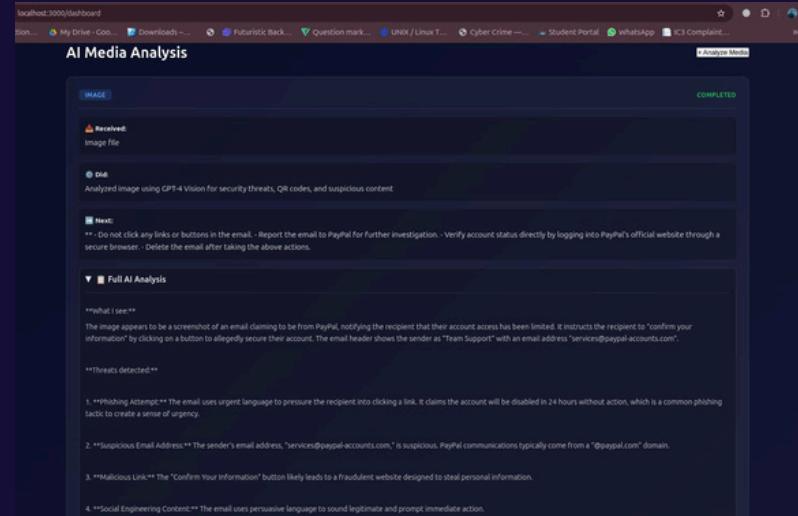
# Model Performance:
accuracy: 0.942
Precision: 0.942
Recall: 0.942
F1 Score: 0.942

precision    recall   f1-score   support
          0       0.94      0.94     0.94      17
          1       0.94      0.94     0.94      34
accuracy: 0.942
macro avg: 0.942
weighted avg: 0.942

Model saved to: /backendl/ml_model/model.pkl
Top 10 Most Important Features:
   Feature  Importance
25  is_private_ip  0.359100
24  payload_length  0.359099
0   payload_word_count  0.092367
18  url_has_digits  0.092367
30  number_ratio  0.053214
21  http_port  0.044723
29  uppercase_hex  0.044723
31  payload_type_encoded  0.035886
1   payload_has_url  0.028384
20  url_has_short_url  0.023384
```

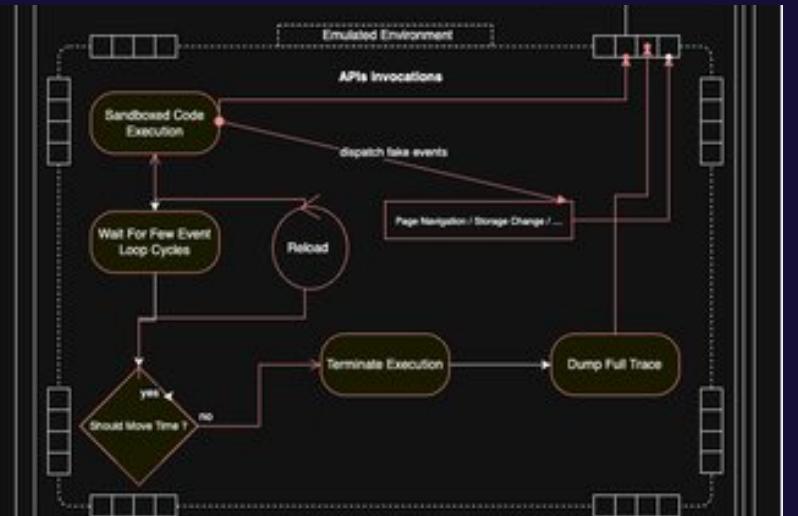
- Random Forest classifier
- 94% accuracy
- 145 URLs trained

GPT-4o Integration



- Intent analysis
- Plain-English explanations

Sandbox Execution (Future work/ in progress)



- Playwright headless browser
- Form detection
- Auto-fill

Tested on Real Attacks

```
khan@khan-Blade-Stealth-13-Late-2020-R209-0327:~/Downloads/ImperialAI-hackathon$ curl -X POST http://localhost:8000/api/traffic/receive/ \
--header 'Content-Type: application/json' \
-d '{
  "id": 1,
  "source_ip": "203.0.113.45",
  "destination_ip": "192.168.1.48.2068712",
  "ml_prediction": "malicious",
  "confidence": 0.81,
  "analysis": "High"
}'
```

- Synthetic dataset
- Validated with actual phishing samples

Next 90 days:

