

**SheepAI**

# CyberShepherd

AI-powered cybersecurity news aggregation, filtering,  
and summarization platform

**95%**

Noise Reduction

**<2min**

vs 45min Daily

**500+**

Articles Analyzed



# The Problem

## Security Teams Are Drowning



### 100+ daily articles

From The Hacker News, BleepingComputer, CISA alerts...



### 95% is irrelevant noise

WordPress exploits for a Python/AWS team? Useless.



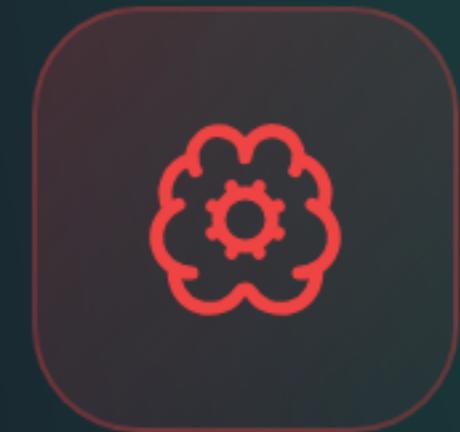
### 45+ minutes daily

Wasted scanning headlines that don't apply



### Critical threats get buried

The one article that matters is lost in the noise



## Information Overload

A CISO using AWS + Python shouldn't see WordPress exploits.

They need the Python supply chain attack that could hit them  
**Monday morning.**



# The Solution



## Your AI Security Analyst

CyberShepherd watches the flock so you don't have to.

It understands YOUR tech stack and delivers only what matters.



### Auto-Scrape & Analyze

Hourly ingestion from top security sources, AI-analyzed with GPT-4o



### Personalized Filtering

Tell us your stack once. We filter 10,000 articles to the 5 that matter.



### Priority Scoring

Critical/High/Medium/Low classification with action items



### RAG Chatbot

"Does this npm attack affect our Lambda?" — Get instant answers.

# How It Works



## Ingestion Pipeline

```
# Every hour:  
1. Scrape The Hacker News RSS  
2. Deduplicate against existing URLs  
3. Extract full article content  
4. GPT-4o-mini → Structured Analysis  
5. Generate embeddings (1536d)  
6. Store in Supabase + pgvector
```

## RAG Chatbot

```
# User Query: "nvidia bugs RCE"  
1. Enrich query (expand abbreviations)  
2. Keyword pre-search (vendor names)  
3. Semantic search (pgvector)  
4. Merge + rank top 10 articles  
5. Build context prompt  
6. Stream GPT-4o response via SSE
```



# Key Features



## Interactive Map

Click regions to filter news by geography. See threat hotspots at a glance.



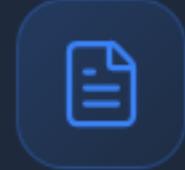
## Slack Alerts

Instant notifications for Critical/High priority threats to your security channel.



## Company Profiler

Paste your website URL → AI suggests the perfect filters for your tech stack.



## Smart Summaries

TL;DR, Key Takeaways, Action Items — understand any threat in 30 seconds.



## Semantic Search

Natural language queries find related articles even without exact keywords.



## Smart Tagging

Auto-categorization: Security, AI, Cloud, Data Breach, Vulnerability, and more.

! CRITICAL

⚠ HIGH

ⓘ INFO

# Tech Stack



**Next.js 15**  
React 19 • App Router



**FastAPI**  
Python 3.11 • APScheduler



**Supabase**  
PostgreSQL • pgvector



**OpenAI**  
GPT-4o-mini • Embeddings



**LangChain**  
Structured Output



**Edge Functions**  
Deno • SSE Streaming



**Tailwind CSS**  
shadcn/ui • Zustand



**Docker**  
Railway • Vercel

**517**

Articles Analyzed

**1536**

Embedding Dimensions

**3**

Edge Functions

**10+**

API Endpoints



# CyberShepherd

**Stop Reading.  
Start Knowing.**

Your competitors are still reading.

You're already patched.



[Try CyberShepherd](#)

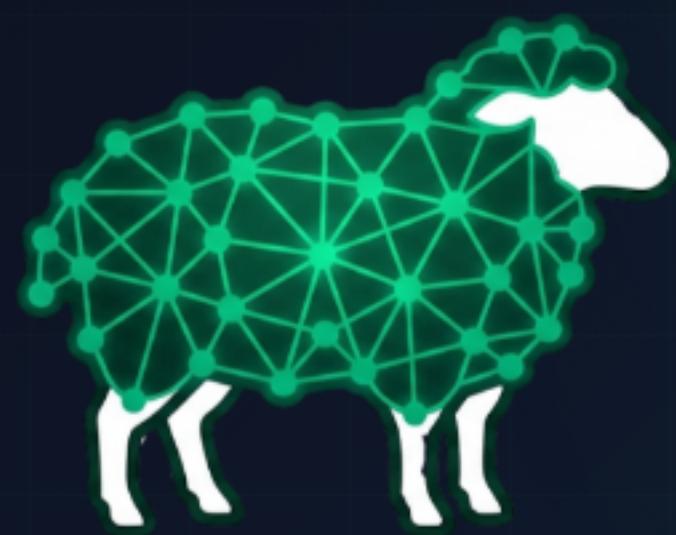


[View Demo](#)

🏆 SheepAI Hackathon 2025

📍 Zagreb, Croatia

👤 Team CyberShepherd



BEEEE!

