

# Secure AI By Design

WITH PALO ALTO NETWORKS



# AI Is Quickly Becoming The Most Disruptive Technology Since Cloud

## The A.I. Revolution Will Change Work. Nobody Agrees How.

The tally of how many jobs will be "affected by" world-changing technology is different depending on who you ask.



May 23, 2023 - Economy & Business

## Elon Musk: AI will change human race 'a lot'



## How unbelievably realistic fake images could take over the internet

AI image generations like DALL-E and Midjourney are getting better and better at fooling us.

By Sara Morrison | [sara@vox.com](mailto:sara@vox.com) | Mar 30, 2023, 6:30am EDT



## Generative AI is poised to change everything. Is your company ready?



Marc Andreessen - e/acc @pmarca

AI is bringing a sudden rush of new young tech super geniuses out of woodwork. Makes me proud to be a technology brother.



1:40 PM - Mar 13, 2023



## Outcry Against AI Companies Grows Over Who Controls Intern's Content

Websites like Reddit and writers including James Patterson and Sarah Silverman demand compensation for work they suspect was used to train new artificial-intelligence technology



## AI Can Now Write Code That's Better Than Humans

Devin Coldewey  
@techcrunch / 10:04 AM PST - February 2, 2022



## THE SHIFT How ChatGPT Kicked Off an A.I. Arms Race

Even inside the company, the chatbot's popularity has come as something of a shock.



Elon Musk @elonmusk

Replying to @Scobleizer  
Some of the AI art is incredible & it keeps getting better!

1:02 PM - Apr 2, 2023

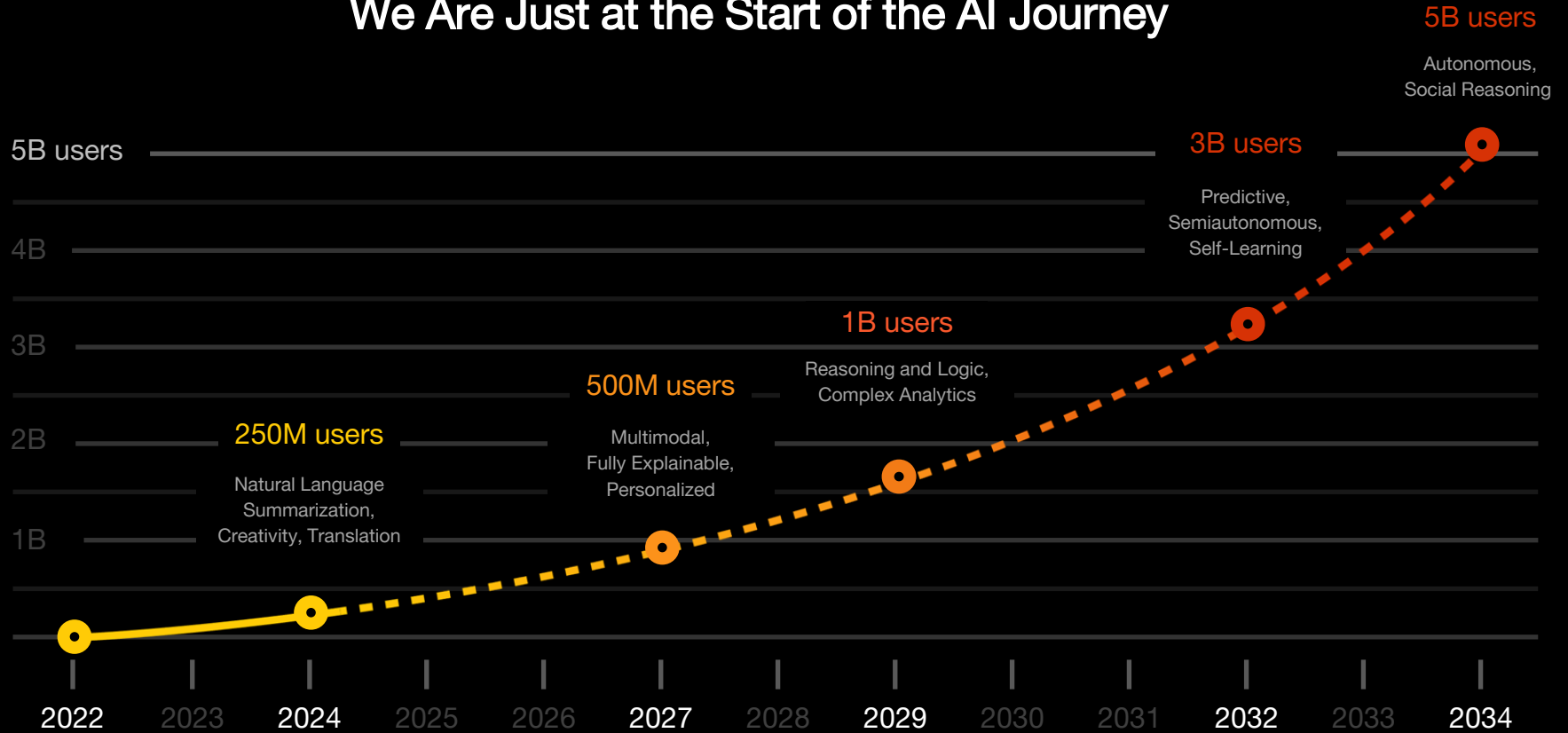


TECH - ARTIFICIAL INTELLIGENCE

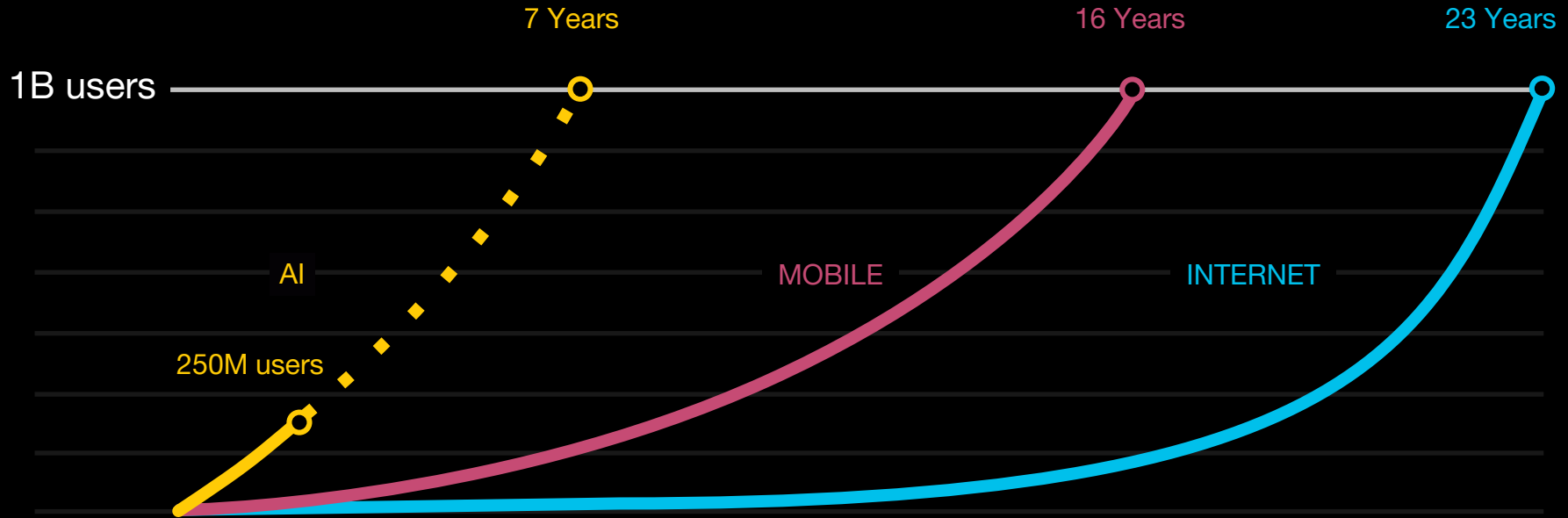
## The AI Arms Race Is Changing Everything



# We Are Just at the Start of the AI Journey

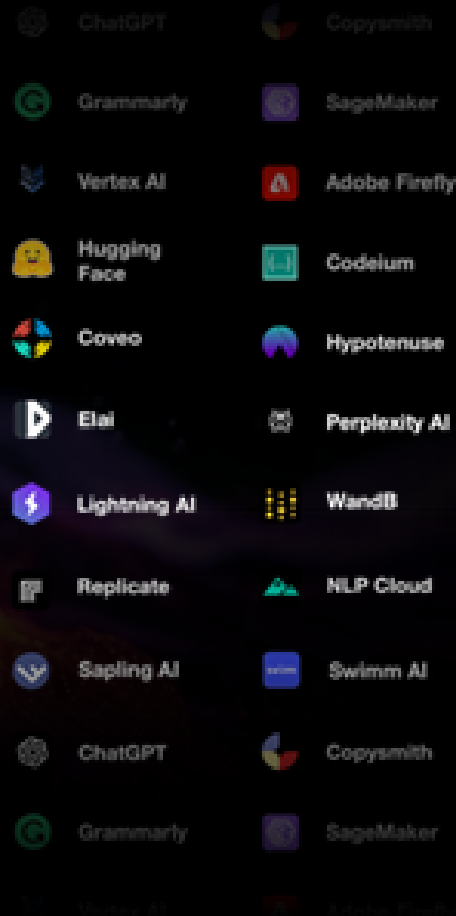


# AI Is Already the Fastest-Growing Technology in Our History





**57%**  
of employees  
use public GenAI  
apps **weekly**





# And **Adversaries** See the Same Promise in AI



**Speed**

**Hours**

From Compromise to Exfiltrate Data<sup>1</sup>

**THE WALL STREET JOURNAL.**

**AI Is Generating Security Risks Faster Than  
Companies Can Keep Up**



**Scale**

**Ransomware**

Volume to surge<sup>2</sup>



**NCSC Says AI will Increase Ransomware,  
Cyber Threats**



**Scope**

**Prompt Injection**

Generative AI's Biggest Flaw<sup>3</sup>

**DARK**READING

**Forget Deep Fakes or Phishing: Prompt  
Injection is GenAI's Biggest Problem**

1. Unit 42 Cloud Threat Report - Volume 7, 2023, Unit 42 Engagement Experience

2. <https://www.ncsc.gov.uk/report/impact-of-ai-on-cyber-threat>

3. <https://www.wired.com/story/generative-ai-prompt-injection-hacking/>

4. [https://owasp.org/www-project-top-10-for-large-language-model-applications/assets/PDF/OWASP-Top-10-for-LLMs-2023-v1\\_1.pdf](https://owasp.org/www-project-top-10-for-large-language-model-applications/assets/PDF/OWASP-Top-10-for-LLMs-2023-v1_1.pdf)

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# AI Is Expanding the Horizons of What's Possible for Cyberthreats



If the SolarWinds attack used  
AI, victim count could have  
been 1,000s



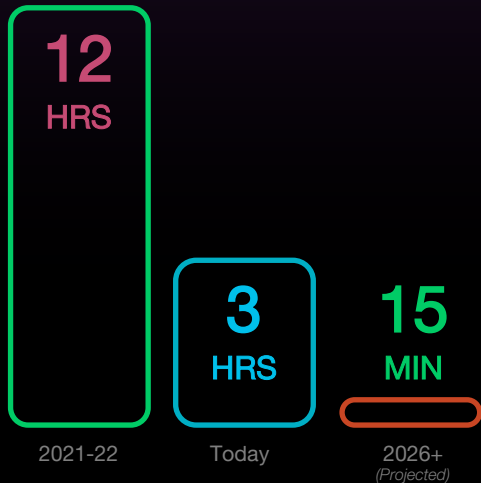
Imagine it taking  
<4 hours from compromise to  
exfiltration



With AI, every  
attack could be a  
novel attack

# AI Is Turbocharging the Speed and Scale of Attacks

## Build Ransomware



\$2B impact from attack on a US health insurer in 2024

## Compromise & Exfiltrate



15 million users' PII and confidential data exfiltrated in Jan 2024

## Exploit Vulnerability



500+ organizations and 35+ million people affected by MoveIT vulnerability

Sources: 56% increase in exploited Zero Days in 2023 (Year-on-Year increase based on Google Cloud Blog March 26 2024), 73% increase in Ransomware attacks in 2023 (SANS Blog Jan 15 2024), 78% increase in data breaches and leaks in 2023 (WSJ Article March 15 2024), Most companies need >2-3 days to resolve an incident (XSIAM customer interviews and XSIAM product telemetry for customers)



# We Are Ready to Help You Win the Fight

Embedding AI Across  
Your Security Stack

Securing AI  
by Design

Radically Simplifying  
Cybersecurity

# We Believe Enterprises Need to Secure AI by Design

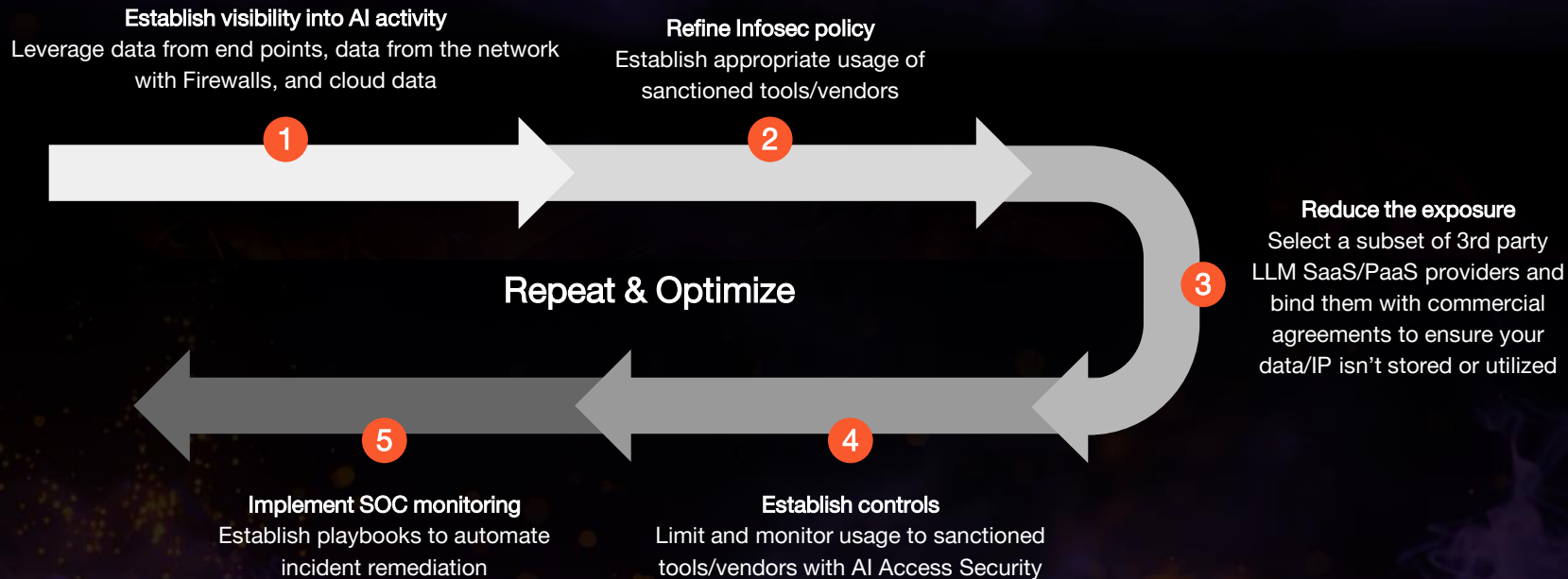
**Track and monitor** AI usage for every employee

**Secure every step** of AI app development lifecycle and supply chain

**Protect AI data** from unauthorized access and leakage at all times

Delivered as an extension of existing cybersecurity solutions

## Secure AI requires specific visibility and controls



# To Secure AI by Design, We have a comprehensive Set of Solutions

A circular graphic with a glowing orange and yellow border, resembling a lightning bolt or energy ring. The center is black with the text "AI Access" in white.

AI  
Access

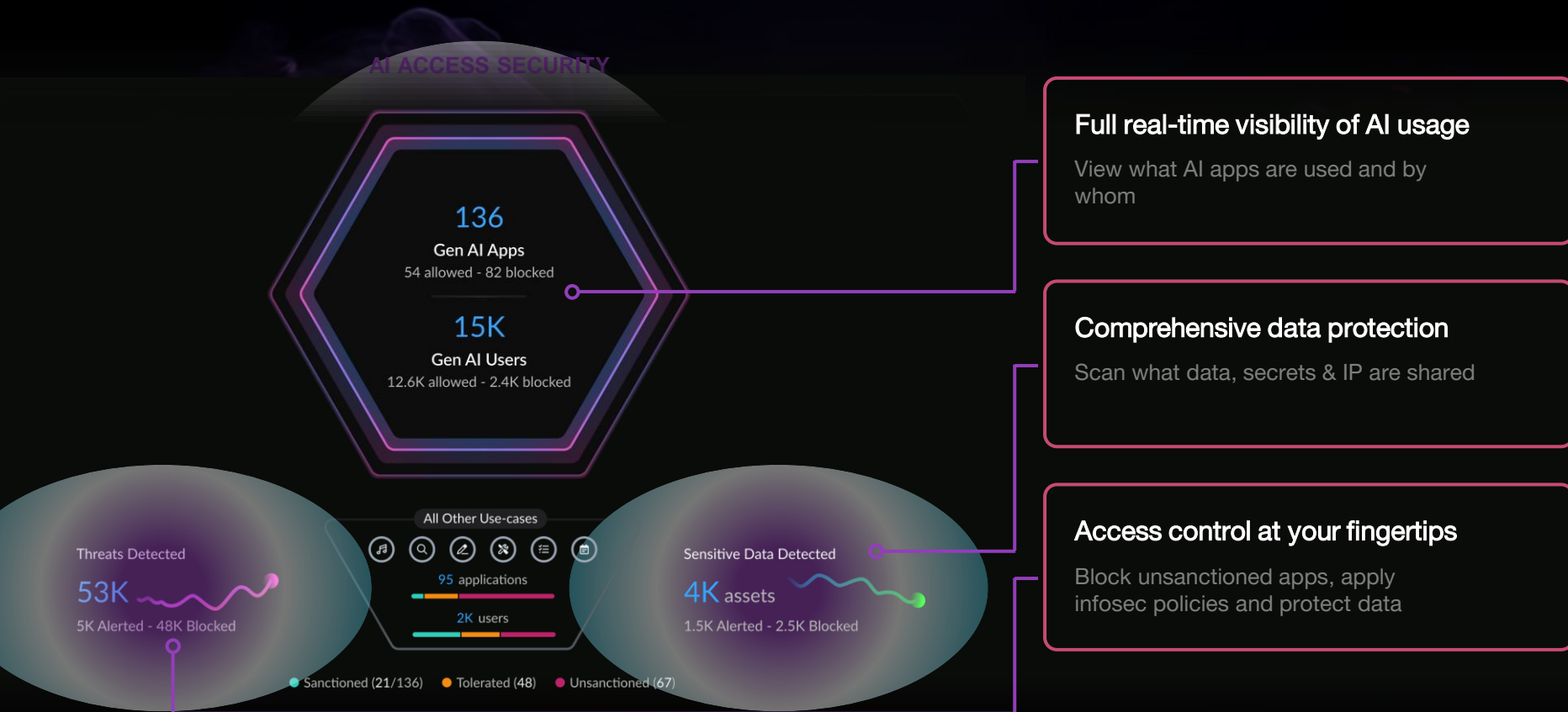
A circular graphic with a glowing orange and yellow border, resembling a lightning bolt or energy ring. The center is black with the text "AI-SPM" in white.

AI-  
SPM

A circular graphic with a glowing orange and yellow border, resembling a lightning bolt or energy ring. The center is black with the text "AI Runtime" in white.

AI  
Runtime

# AI Access Security to Enable Safe AI Adoption to Employees





# Securing Enterprise AI Applications

Automatically discover entire AI application ecosystem

## AI Security Posture Management



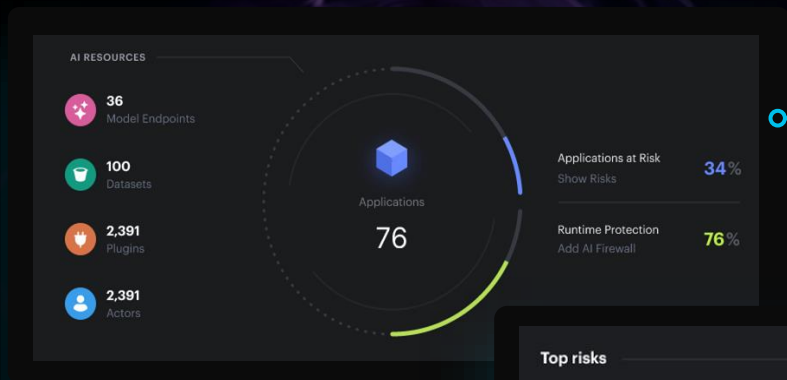
Reduce AI supply chain and infrastructure security risk; identify data exposure

## AI Runtime Security



Protect enterprise AI applications, models, and data from AI and foundational threats in runtime

# AI-SPM to Protect AI Apps from Malicious Building Blocks



## Full discoverability of your entire AI ecosystem

View AI models, infra, datasets, and agents

## Real-time assessment & identification

Analyze risk continuously with extensive threat intelligence

## Prioritization and recommendation

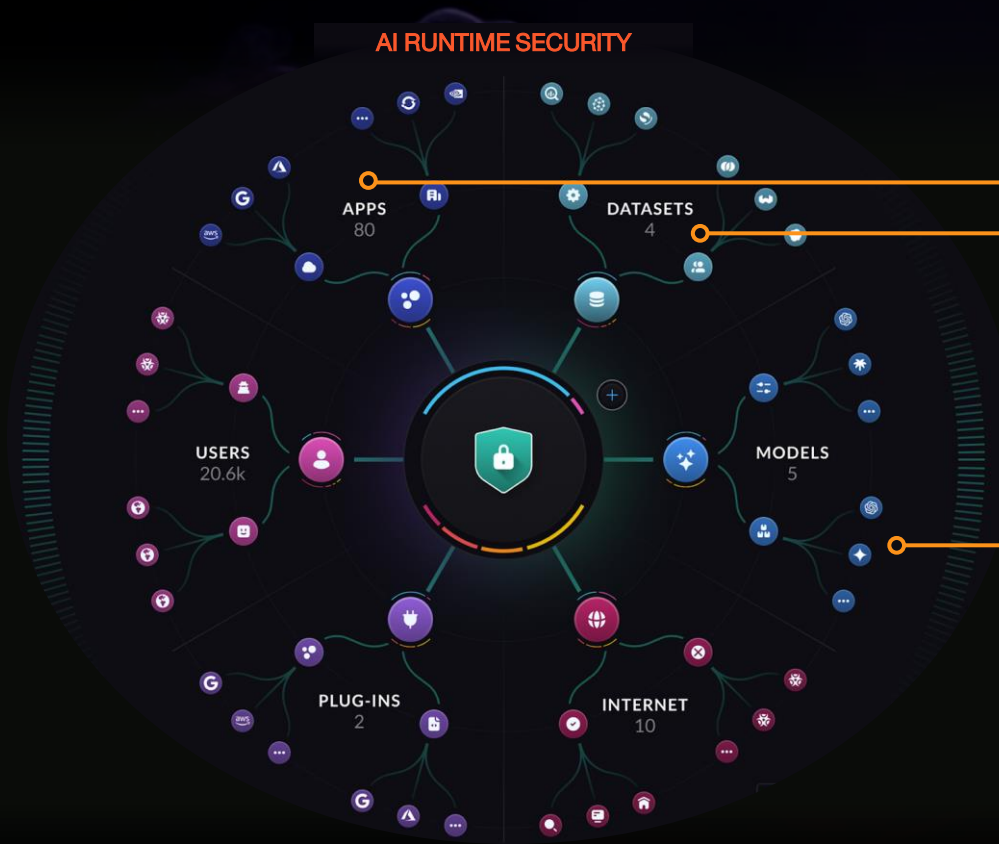
Generate actionable insights and guided remediations

**Top risks**

	<b>Training dataset publicly writable</b> First Discovered on Dec 19, 2023, 9:01 AM	Critical
	<b>Public inference dataset</b> First Discovered on Dec 19, 2023, 9:01 AM	High
	<b>AI Deployment without content filtering</b> First Discovered on Dec 19, 2023, 9:01 AM	High
	<b>Model serving misconfigured app</b> First Discovered on Dec 19, 2023, 9:01 AM	Medium

# AI Runtime Security to Protect Apps, Models, and Data

## AI RUNTIME SECURITY



### AI App Protection

Stop zero-day threats in zero time

### AI Data Protection

Protect sensitive data from being leaked

### AI Model Protection

Safeguard AI models from misuse and attacks

# Thank You

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