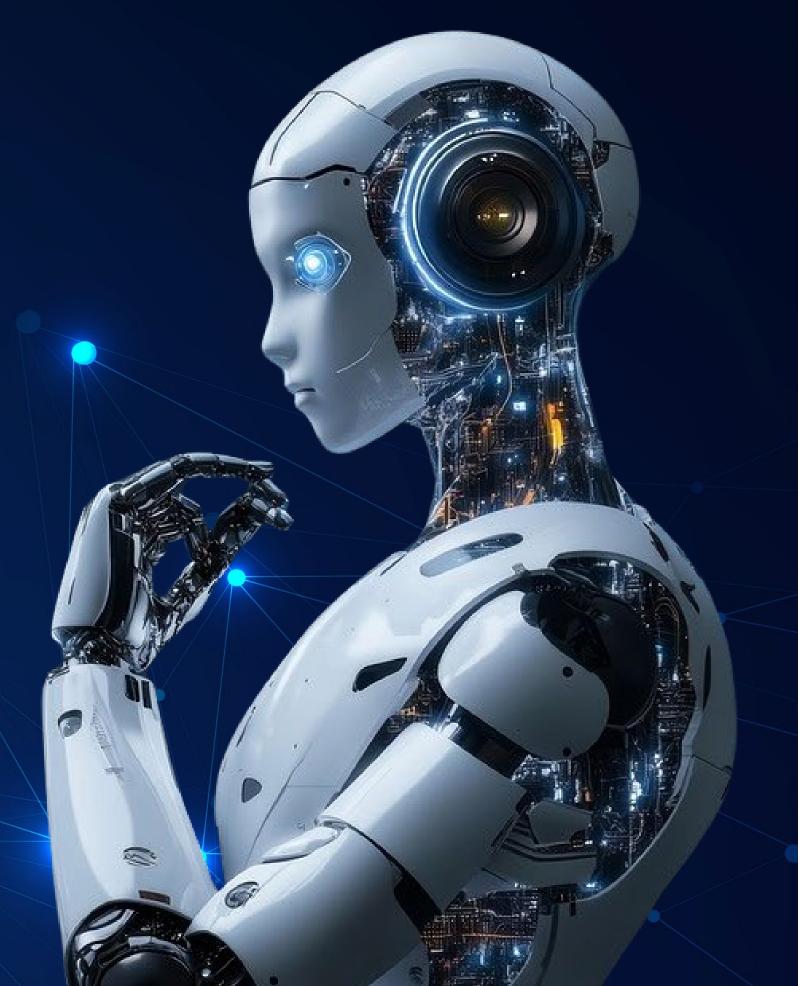


# Al & Security

Hype, Risk, and Real-World Protection

#### **2025 ONECON**

Artificial Intelligence is transforming cybersecurity—both for defenders and for attackers. In this session, we'll cut through the hype to show how AI is reshaping the security landscape and what it means for your business.





## INTRODUCTION

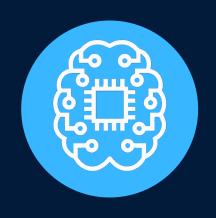
## Rebecca Hailey MSCs.ITM

**Security Practice Leader** 

- 15+ years of experience in IT and Cybersecurity
- Master of Science in Cybersecurity Southern New Hampshire University
- Generative AI Certification Johns Hopkins University



## Al Basics for Business Leaders



Machine Learning (ML)

Finds patterns in data



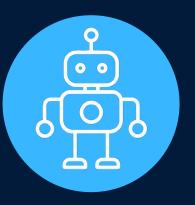
Generative Al (GenAl)

Creates new content (text, images, code)



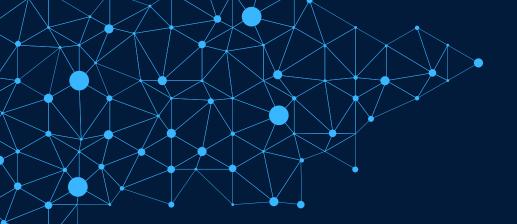
**Chat Al** 

Conversational Q&A (built on GenAl)



**Agentic Al** 

Takes actions on its own (Reset accounts, schedule tasks)



## Al Drawbacks



#### Hallucination

Confidently makes things up

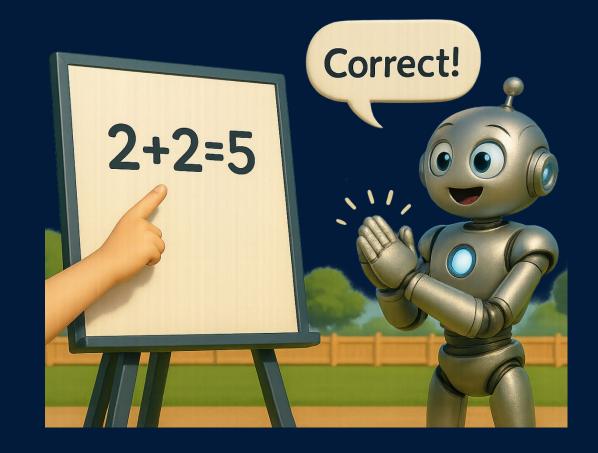
May produce fake citations



#### **Always Affirming**

Never tells you you're wrong

Doesn't admit mistakes





#### Bias in Data

Outputs reflect flaws in training data



#### Lack of Judgement

No context, nuance, or consequences



## Internal Risks



**Shadow Al** 



Data Leakage & Compliance Risks



**Oversight & Governance** 

## Shadow Al



Using AI tools without approval or oversight, putting company data at risk.

### Risks

Proprietary data leaked

Customer or Employee PII exposed

No control over Confidentiality/Privacy







# Data Leakage & Compliance Risks

#### PII Exposure

Customer and employee
data entered into Al tools
can lead to HIPAA, GDPR, or
CCPA violations, severely
impacting your company's
reputation and finances.

#### **Business Secrets Loss**

Entering proprietary data into public Al models risks **exposing trade secrets**, which may resurface in unexpected places, jeopardizing your competitive advantage.

#### Outdated Al Guidance

Al models trained before regulation changes may provide **stale advice**, leading to potential compliance failures and increasing legal liabilities for your organization.





# Al Oversight And Governance



#### **Policies**

Establish comprehensive guidelines to ensure ethical AI development and usage.



#### Containerization

Implement secure environments for AI models to protect data and system integrity.



#### Training

Provide ongoing education for teams to understand AI governance and best practices.

# External Threats

#### **OSINT**

Open-Source Intelligence public data, posts, repos, lelks, victim DBs



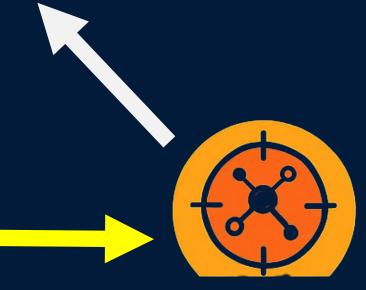
#### **Al-Enhanced Phishing**

SpamGPT → polished personalized phishing at scale



#### Voice & Image Cloning

Deepfake execs or loved ones to authorize fraud



#### **Recon & Targeting**

Mapping people, tech, and partners to find the fastest way in



## Malware Generation & Obfuscation

Al-Created code that mutates to evade detection



#### **Credential Attacks**

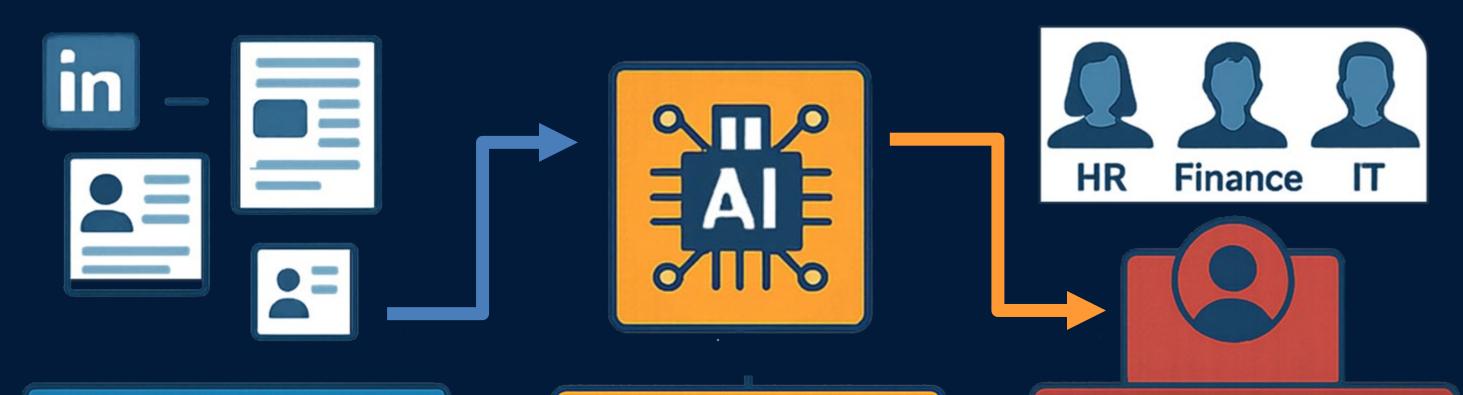
Al guesses, steals, or bypas ses weak logins



#### Fraud & Misinformation

Flood of fakes to sway opinion or damage trust

# Reconnaissance and Targeting



### **Public OSINT**

Profiles, job posts, forums, repos

## Al processing

Entity resolution, correlation, NLP embeddings

# Spear phishing & BEC at scale

Context Aware Dossiers

# Voice & Likeness Cloning

JK engineering firm Arup falls victim to £20m deepfake scam

Hong Kong employee was duped into sending cash to

criminals by AI-generated video call



Few seconds of audio to clone

I NEED help

Send \$15K i **Bitcoin NOW** will be arrest









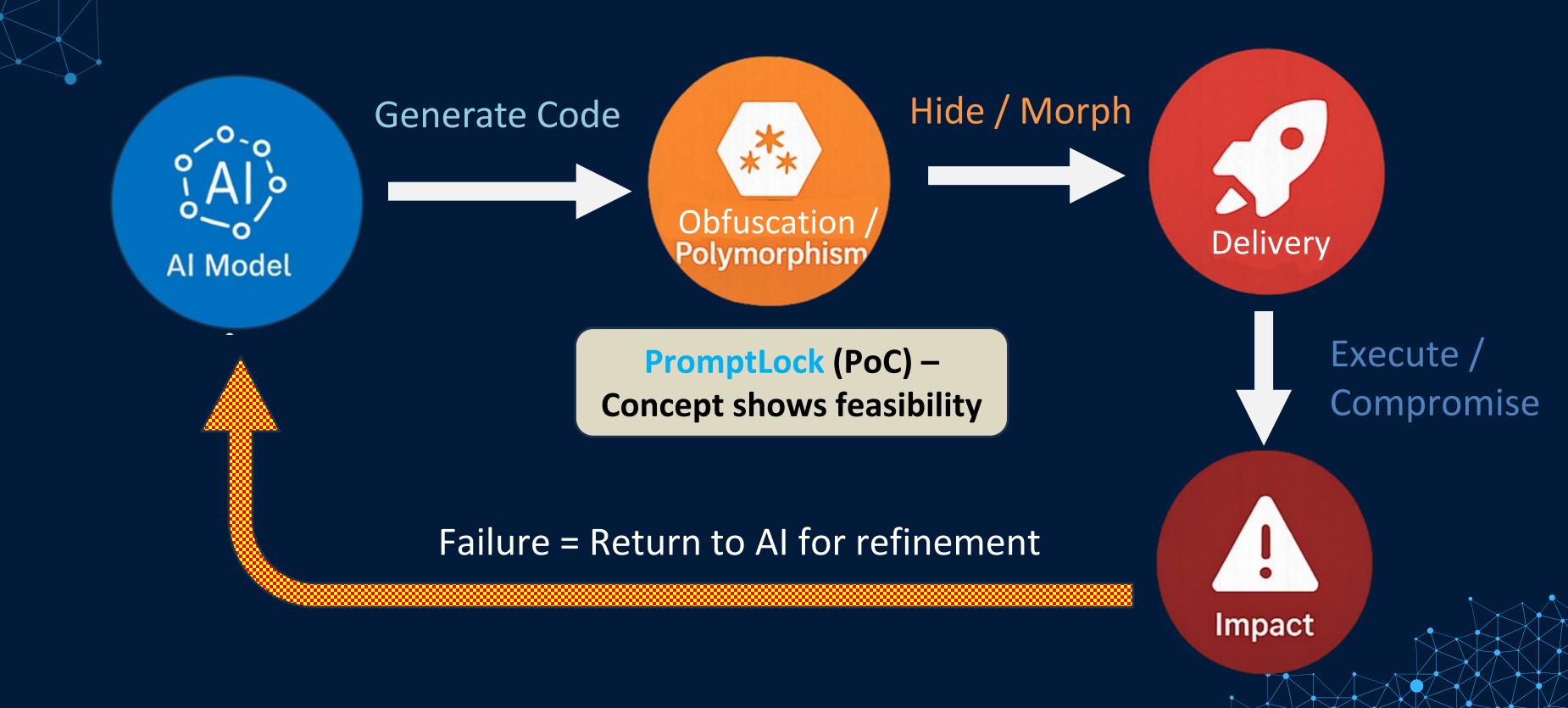








## Malware Generation & Obfuscation



## **Credential Attacks**

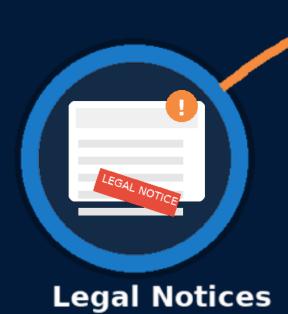


#### What to watch

- High-velocity failures
- Unusual devices/ locations



## Fraud & Misinformation



- Regulatory/legal notices that demand immediate action
- Faux Official Letterhead and counsel contact details
- Pressures victims to rush payments or compliance steps



#### **Fake Suppliers**

- Synthetic supplier IDs
- Forged invoices / payee changes
- Fake websites / social proof



**Business Impact** 

- Stock and market impact
- Brand / Reputation hit
- Loss payment / Operational Disruption

## What we can do to help



**Managed Services** 



Firewall as a Service



EDR / XDR



Managed
Detection and
Response



SOC/SIEM



Incident Response

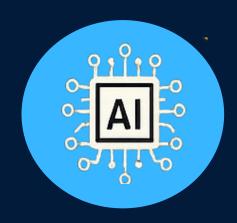


Penetration Testing



Security Awarenes Training

## 2026 Roadmap



**Al Gateway** 



**GRC Advisory** 





## THANKS FOR ATTENDING!



## Rebecca Hailey MSCs.ITM

**Security Practice Leader** 

rhailey@integraone.com

https://www.linkedin.com/in/rebeccahailey/





managing complexity delivering

simplicity