# AI + cybersecurity

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### **Security-focused AI**

- <u>1. Darktrace</u>
- <u>2. Cylance</u>
- <u>3. Vectra Al</u>
- <u>4. SentinelOne</u>
- <u>5. Cybereason</u>
- <u>6. McAfee MVISION</u>
- 7. Fortinet FortiAl
- <u>8. Symantec Endpoint Protection</u>
- <u>9. Seif.ai</u>

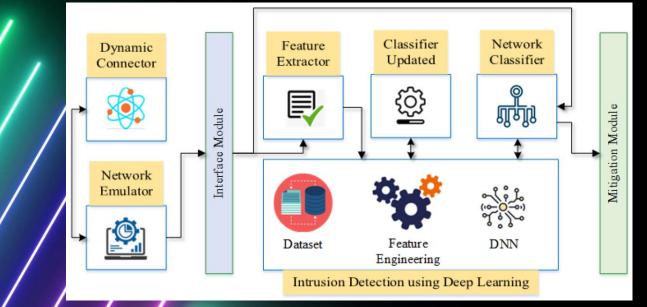
# **O Best Al Security Tools**



### **DETECTING INTRUSION USING DL**

### **RESPONDING WITH ANALYTICS-DRIVEN INSIGHTS**

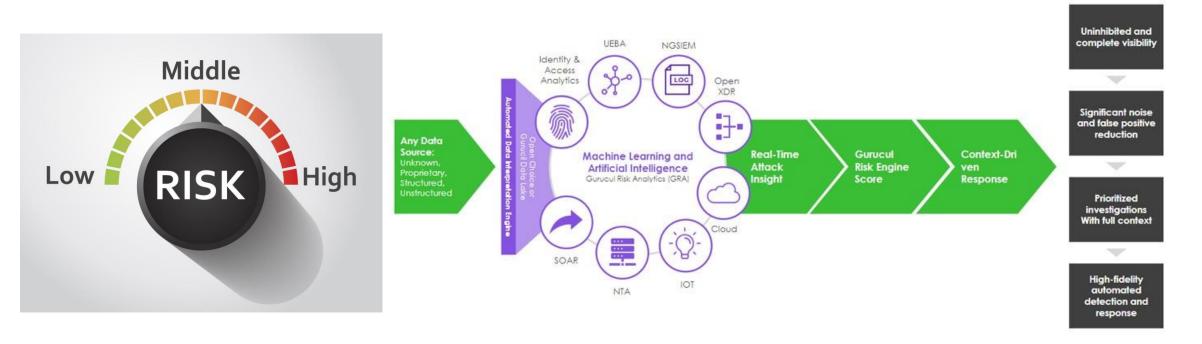
### **AUTOMATING SECURITY PROCESSES.**



# **Al-powered Intrusion Detection Systems**

**Risk assessments & threat intelligence** 

- analyzing big sets of data, example is User and Entity Behavior Analytics (UEBA)



- process mining with AI, for looking at possible risk on the established process level



### **5 WAYS OF USING AI TO PREVENT FRAUD**

 Intuitively set fraud transaction monitoring thresholds
Detect groups of customers
Uncover instances of fraud using NLP
Provide alert prioritization
Detect anomalies

# FRA PREVEN

### **5 WAYS AI IS BEING USED FOR FRAUD**

1.Combining real and fake data to create fake identities.

2.Forging passports and ID documents to circumvent identity verification and security procedures.

3.Conducting phishing scams at scale.4.Voice cloning to redirect bank funds.5.Creating deepfake videos for scams.

## Al & Fraud Prevention

# **Critical System**

Application Domain	Example Systems Typical	AI Uses	
telecommunication infrastructure	public telephone network, local branch exchange	FA, ID	
water supply systems	water treatment plant, dam control	FA, FS, PHM	Contract Contractor
electrical power systems	nuclear power plant, regional electrical grid	FA, FS, PHM, PO	Critical System
oil and gas generation and distribution	gas pipeline, gas powered power plant	FA, FS, PHM, PO	ss Critical System
roadway transportation systems	Smart interstate highway, traffic monitoring and control	FA, FS, PHM, PO	
railway transportation systems	high speed train line, metropolitan train network control	FA, FS, PHM, PO	
air transportation systems	air traffic control system network, passenger aircraft autopilot	FA, FS, PHM, PO	
banking and financial services	pension fund management, stock market management	FD, ID	
public safety services	air passenger screening, police dispatch	FD, ID, PO	
healthcare systems	robotic surgery, healthcare record management	FD, ID, PO	1, ULT
administration and public services	employee personnel database, retirement management	FD, ID	

Key -- FA: failure analysis, FD: fraud detection, FS: failsafe operation, ID: intrusion prevention and detection, PHM: system prognostics and health management, PO: Performance optimization (cit. Al and Critical Systems From hype to reality Laplante, Penn State; Milojicic, Serebryakov, HPL; Bennett, NREL)

### www.educba.com

# **Generative AI + cybersecurity**

Generative AI, AI/ML, AI benefits/risks

#### f ♥ ∞ in BlackBerry Delivers Generative AI Cybersecurity Assistant

Dan Kobialka October 16, 2023



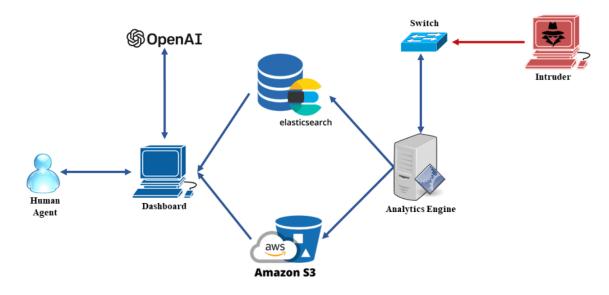
Credit: Getty Images

<u>BlackBerry</u> will provide security operations center (SOC) teams with a cybersecurity assistant that uses generative artificial intelligence (AI) to analyze cyber threats, according to the company.

The assistant, which will initially be released to a select group of Cylance AI customers, leverages private large language models (LLMs) to predict users' security needs, BlackBerry noted.

### HuntGPT:

Pioneering Al-Driven Intrusion Detection in Cybersecurity October 3rd



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Hvala!

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