Category

Data & AI

AI-Enabled Cybersecurity & Threat Detection Playbook

Using AI to catch what rule-based detection misses, without drowning the team in false positives

- Practitioner
- Advanced
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- Administrator
- 09 February 2024
- 4 minute(s)

Overview

A framework for AI-enabled cybersecurity and threat detection — anomaly detection beyond rule-based systems, automated triage support, and adversarial robustness — that captures AI's genuine pattern-detection advantage while managing the false positive volume and adversarial risk AI-based security systems specifically introduce.

Does AI-based threat detection just add another source of false

positive alerts on top of existing rule-based systems? It can, if deployed without deliberate false-positive management — but properly calibrated AI detection can catch genuinely novel threat patterns rule-based systems miss, while requiring the same disciplined threshold calibration and prioritization any alerting system needs to avoid contributing to alert fatigue.

What's "adversarial robustness" and why does it matter specifically

for AI security applications? Adversarial robustness refers to an AI security system's resistance to deliberate manipulation by attackers who understand how the detection model works — a distinctive risk for AI-based security systems that rule-based systems don't face in the same way, since sophisticated attackers can potentially craft inputs designed to evade AI detection specifically.

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but\nproperly calibrated AI detection can catch genuinely novel threat\npatterns rule-based systems miss, while requiring the same disciplined\nthreshold calibration and prioritization any alerting system needs to\navoid contributing to alert fatigue." } }, { "@type": "Question", "name": "What's \"adversarial robustness\" and why does it matter specifically", "acceptedAnswer": { "@type": "Answer", "text": "for AI security applications?\nAdversarial robustness refers to an AI security system's resistance to\ndeliberate manipulation by attackers who understand how the detection\nmodel works — a distinctive risk for AI-based security systems that\nrule-based systems don't face in the same way, since sophisticated\nattackers can potentially craft inputs designed to evade AI detection\nspecifically." } }] }

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