



Cybersecurity Keynote

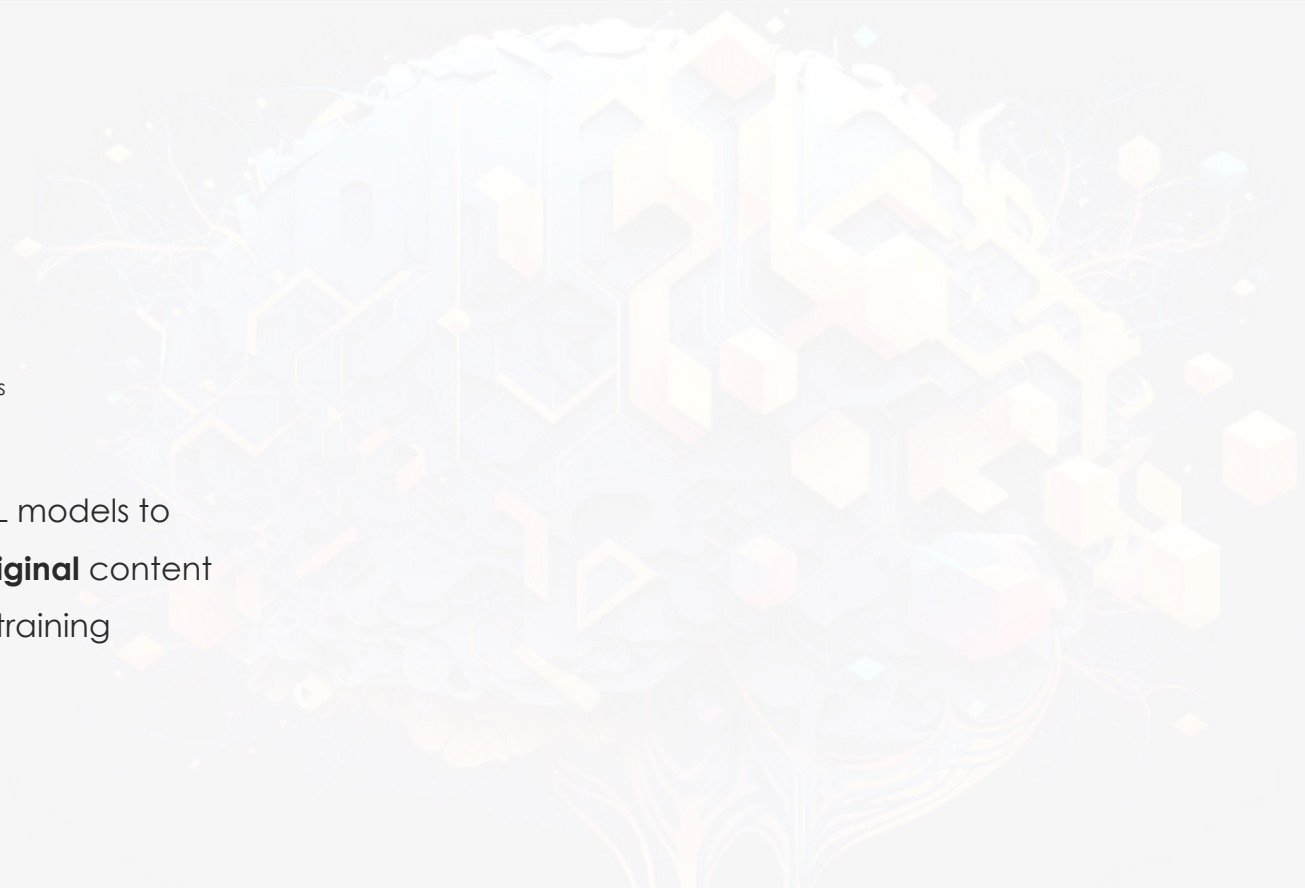
Standards and Performance Metrics for On Road Vehicle Workshop
September 6, 2023

Anuja Sonalker, Ph.D
STEER

Generative AI

In the context of On Road Vehicles

Generative AI uses ML models to generate **new and original** content based on inputs and training



Adversary Upgrade

In the context of On Road Vehicles

Hobby Hacker

Expert Researchers/System Professionals

Nation States and Organized Crime



Hobby Hacker

High motivation for personal gain
Limited financial resources
Limited skill set



Expert Researchers

Access to documentation, tools, networks
Motivation is for improvement



Competitors and Criminals

Financial motivation
Access to insider information,
sophisticated tools



Nation States and Terrorists

Unlimited Financial Resources
Financial or ideological motivation
Access to sophisticated talent pool
and tools



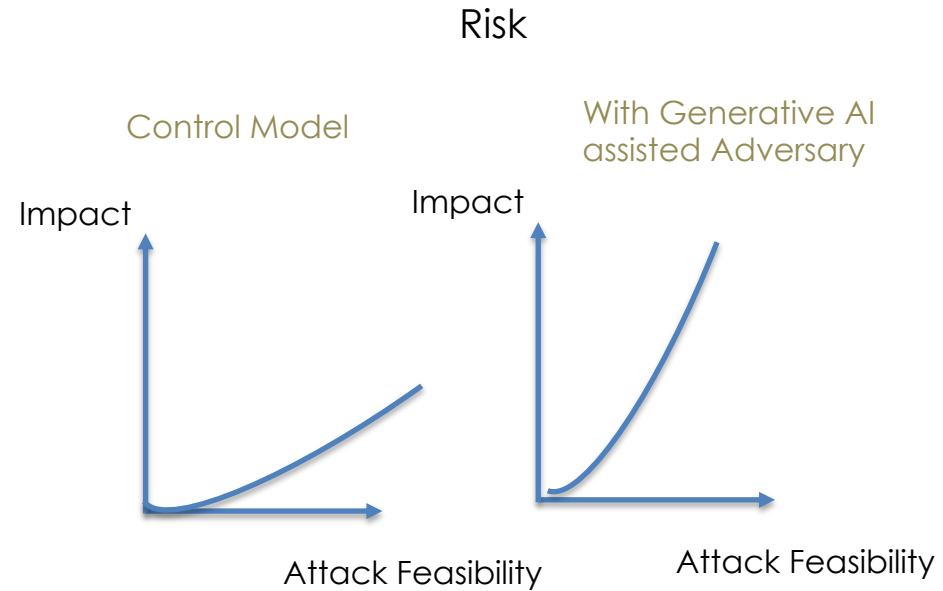
Risk Posture

In the context of On Road Vehicles

Threat Landscape

Attack Potential and Feasibility

Impact



Attack Feasibility

In the context of On Road Vehicles

Time

Expertise

Knowledge

Window of Opportunity

Equipment

Standards based approach to developing automotive systems

In the context of On Road Vehicles

Lockdown Levels of Risk

Apply Treatments Accordingly

Not Just an Engineering Concern

Risk Treatments Span Verticals

Approach

In the context of On Road Vehicles

Continuous monitoring of AI maturity

Measurement (Metrics) to assign tangibility

Blueprint for counter moves

Tactical Roadmap for execution of the blueprint

THANK YOU!