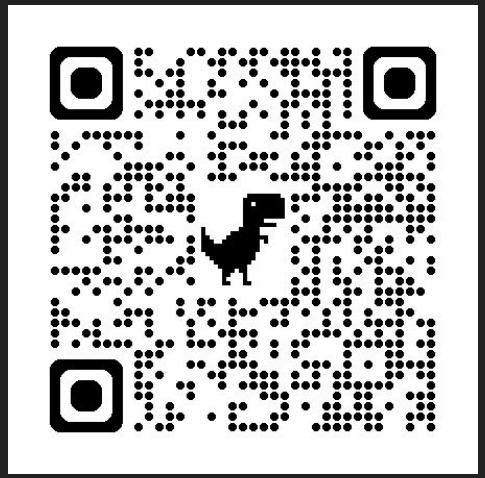
Private, Private, Private: Access Anywhere

By: CarpeDiemT3ch

Workshop Agenda

- How big is your data footprint?
- How do you shrink it?
- Threat Modeling a Conference
- Extreme Privacy Resources

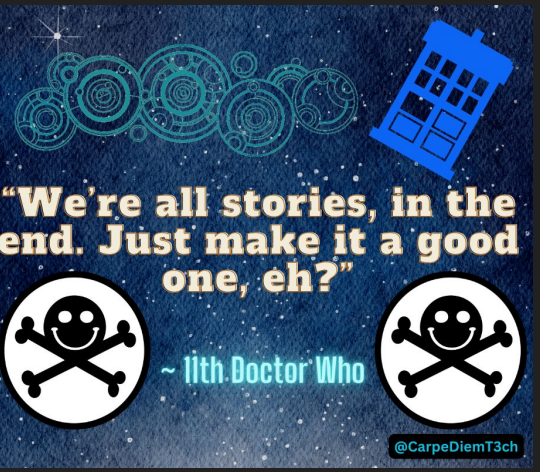


Workshop Resources: bit.ly/DC33Carpe

$whoami

- Live up to my handle
- Security Engineer, researcher, curiosity uncaged
- Traveler
- Doctor Whovian
- Gardner
- Chinchillin’
- Always be Gooning (ABG), SOC goon and volunteer at multiple other cons











Why?

“All human beings have three lives: public, private, and secret.”
— Gabriel García Márquez

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Finding Yourself

- **Workshop Activity**
  - What's your digital footprint?

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OSINT - What's your Digital Footprint?

Act as if you are an adversary (cyber criminal), you are the target of an attack. How much information can you dig up on yourself?

Look for information like:

- Your legal name
- Phone number
- Common usernames
- Address
- Family Members
- Hometown



Bonus: How could this information be used in a targeted social engineering or phishing attack?

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Losing Yourself

- Privacy as a lifestyle
- Techniques
- **Workshop Activity**
  - Obfuscation Techniques & Resources

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Risk Awareness:
What is Threat Modeling?

Threat Modeling is the practice of analyzing a system, process, or other "thing" to identify potential threats and make decisions about how to address/mitigate them.



Risk Awareness
Investigate
Decide
Examinations

Spoofing
Tampering
Repudiation
Information Disclosure
Denial of Service
Elevation of Privilege

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Discussing Conferences

Situation: someone is considering attending a large conference





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Risk Awareness:
What is Threat Modeling?

Investigate: OSINT

Open source intelligence - Data / Information that is available to the public (generally over the internet)



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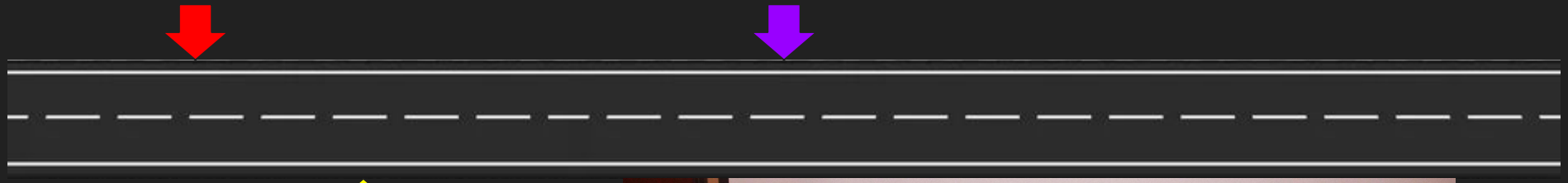
Risk Awareness:
What is Threat Modeling?

Decide:
Conference Decisions & Privacy Practices



Investigate: OSINT

Deciding what is important to you



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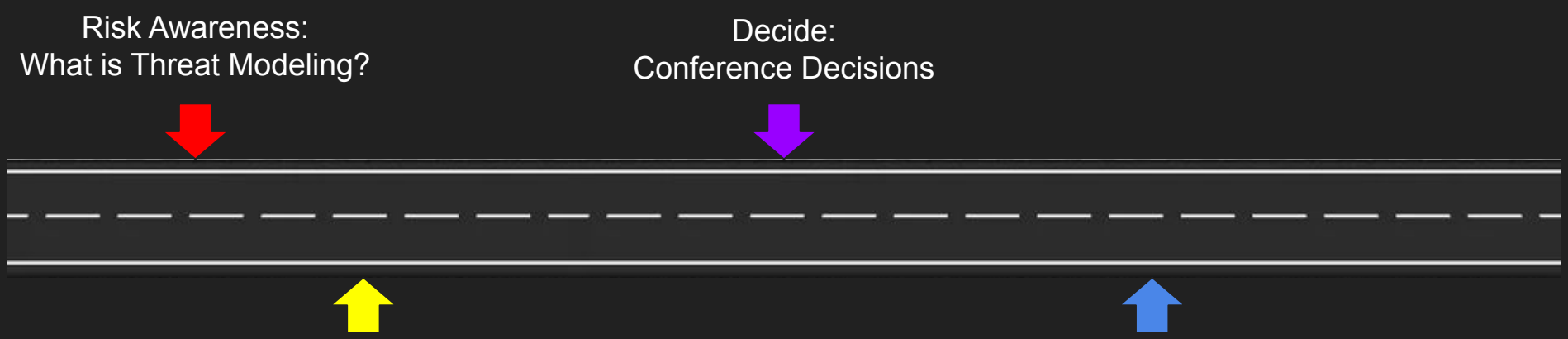
OSINT Decision Matrix

Goal based Categories	Technical	Community Focused	Leadership	Well Known/Name Promotes itself
Goal to have fun	X	X		X
Goal of finding a job		X	X	
Goal of learning to Hack	X	X		X
Goal of learning to code	X			
Goal of networking	X	X	X	X
General education	X	X	X	X
Community Outreach	X	X		
Tools research	X		X	X



Risk = Impact X Likelihood

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Risk Assessing - Workshop Activity

RIDE to Safety with Risk Awareness, Investigations, Decisions, and Examinations.

For every action you take in the choices made from the storylines, what are different threats associated with that choice?

- **List the threats**
- **Rank order the threats from most to least likely**
- **What would be the impact of each?**
- **Would you choose to accept, avoid, transfer, remediate/mitigate?**

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			Risk Measurement	
Choices or Assets	**Threat**	**Vulnerability**	**Impact**	**Likelihood**

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Quantitative Risk Rating

- **Advanced,** quantitative risk rating https://www.owasp-risk-rating.com/
  - Likelihood and impact over variety of categories

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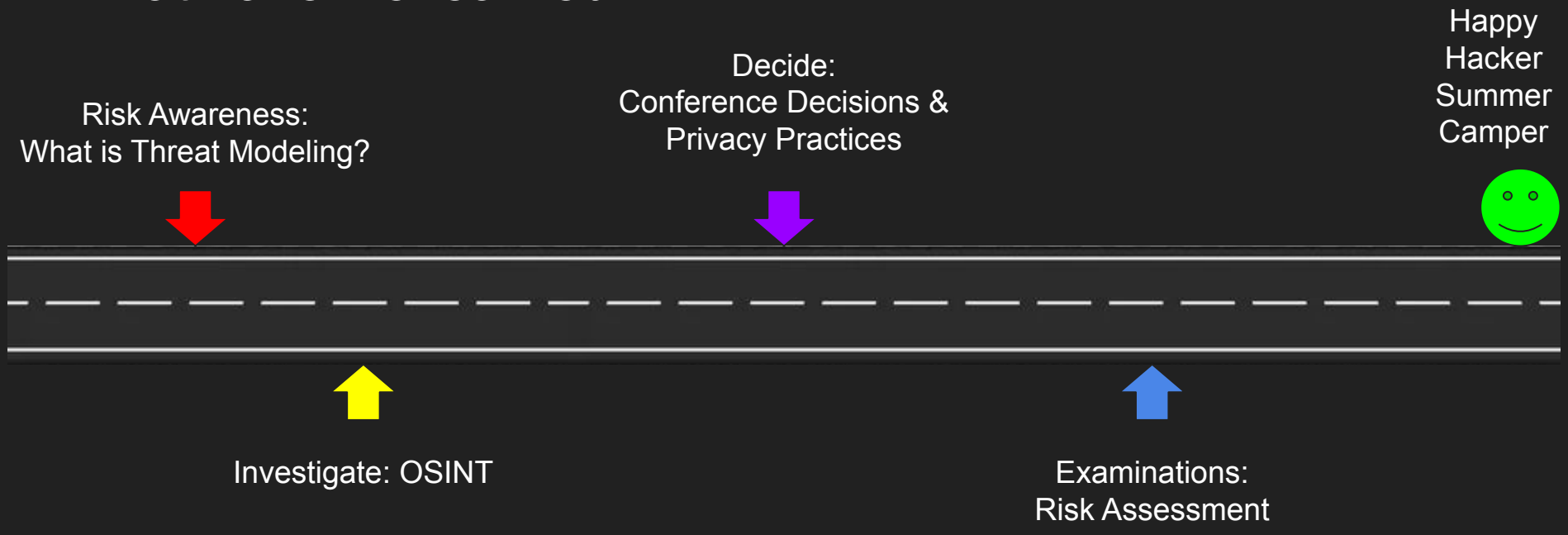
			Risk Measurement	
Asset	**Threat**	**Vulnerability**	**Impact**	**Likelihood**
Smartphone	Mobile cyberattack	Unsecured Wi-Fi networks or Bluetooth connections; phishing emails or texts; malicious apps or links; weak passwords or encryption; outdated software or firmware	Compromise of personal and work data; identity theft; unauthorized access to accounts or devices; malware infection; financial loss; privacy violation	High
Laptop	Theft	Unattended in hotel room or public places	Loss of data and device; breach of company policy; reputation damage; financial cost	Medium
Credit Card	Fraud	Skimming devices at ATMs or POS terminals; online transactions without verification; phishing emails or calls; lost or stolen card	Unauthorized charges; identity theft; credit score damage; financial loss; hassle of reporting and replacing card	Medium
Conference badge	Cloning	RFID technology that can be scanned by unauthorized readers	Impersonation of Alice by attackers to access restricted areas or events or steal her identity or information	Low

What have we learned?



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In Closing and Questions



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Resources to take with you

- https://www.misp-project.org/
- https://pulsedive.com/
- https://controlcompass.github.io/
- https://www.threatmodelingmanifesto.org/
- https://www.microsoft.com/en-us/security/blog/2007/09/11/stride-chart/
- https://www.linddun.org/
- https://www.threatable.io/
- https://owasp.org/www-community/OWASP_Risk_Rating_Methodology
- OSINT CTF https://www.tracelabs.org/
- https://www.globalemancipation.ngo/
- https://www.first.org/volunteers/
- Videos of SANS OSINT Summit 2022

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