

A Cyber Key to Log Analysis
Robust Timestamping Paradigm
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Time

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“Value-Added Proposition Lab Partner”

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“Rule of Law”

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“Percipient Knowledge”

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“1 Minute”

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“2 Minutes”

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“3 Minutes”

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Consensus: “Time Manipulation?”

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Time Manipulator

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In my world, this is a ...

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Cyber Threat

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Bom dia!

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Cyber Time

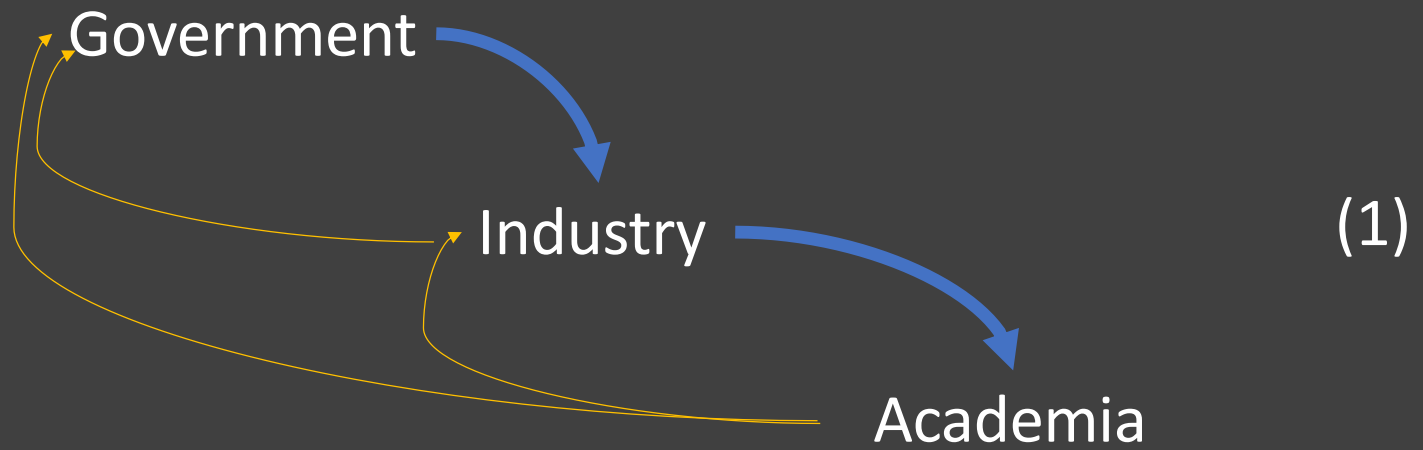
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Posited Cyber Trend

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Prediction Proxies...

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...for Strategic Infrastructure/Critical Infrastructure

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Case Study:

Outages (Cyber, IT, Power) Affecting Airlines and Airports

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Outages Affecting Airlines:

- 3/2016:  
STAR ALLIANCE
- 8/2016:  
SKYTEAM
- 5/2017:  
oneworld
- 6/2017:  
SKYTEAM

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Outages Affecting Airports:

5/2013:



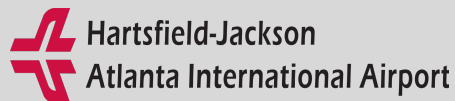
10/2013:



3/2015:



12/2017:



JFK Terminal 4

Outages Affecting Airports:

12/2017: 



10/2018: 



8/2019: 



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Timestamping

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The Cyber-Physical Supply Chain Brittleness Remains...

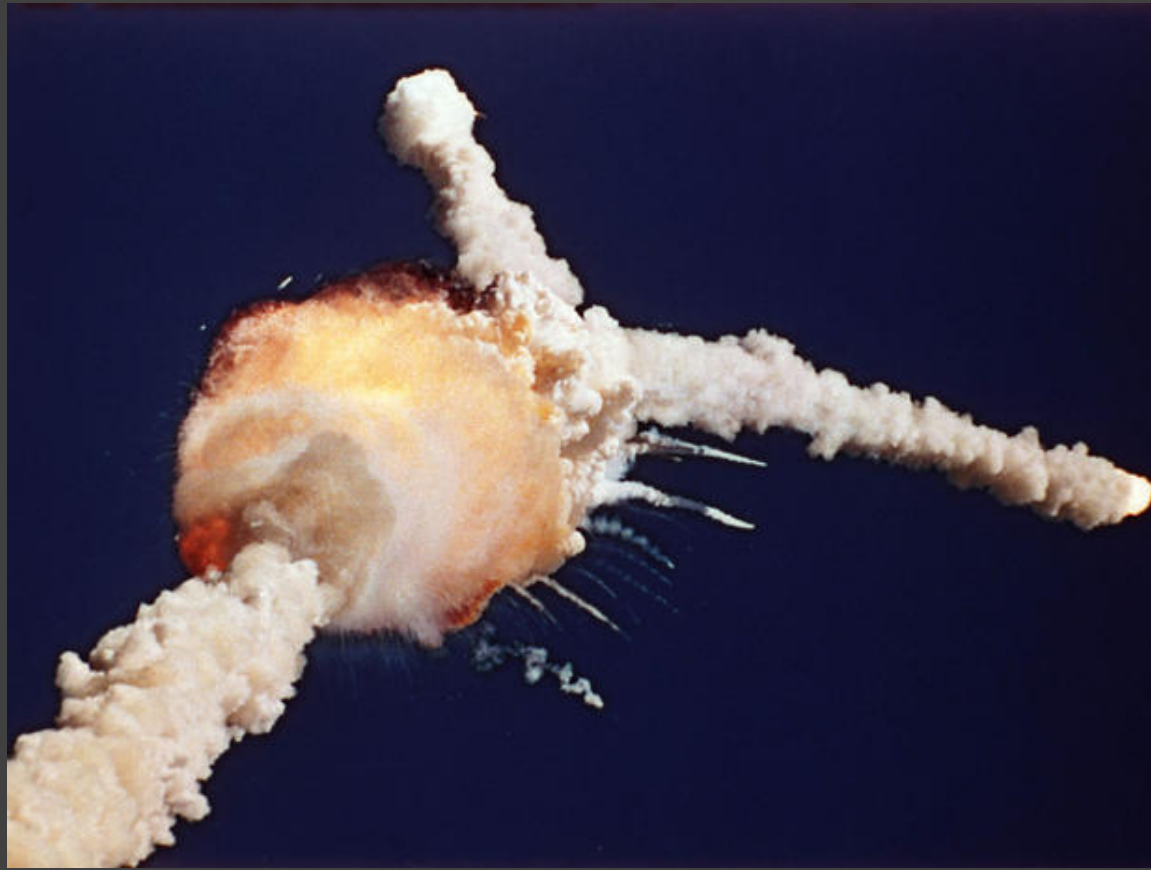
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...at the Terminal Substation

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Digital Twin: Physical and Cyber

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Physical Domain

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...back to the Cyber Domain

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Control Group: Time

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Operations Center

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Watch Floor

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Analyst Pool

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Storage Area Network

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Time Rendering: Constituent Components

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Time Rendering: Global Positioning System (GPS)

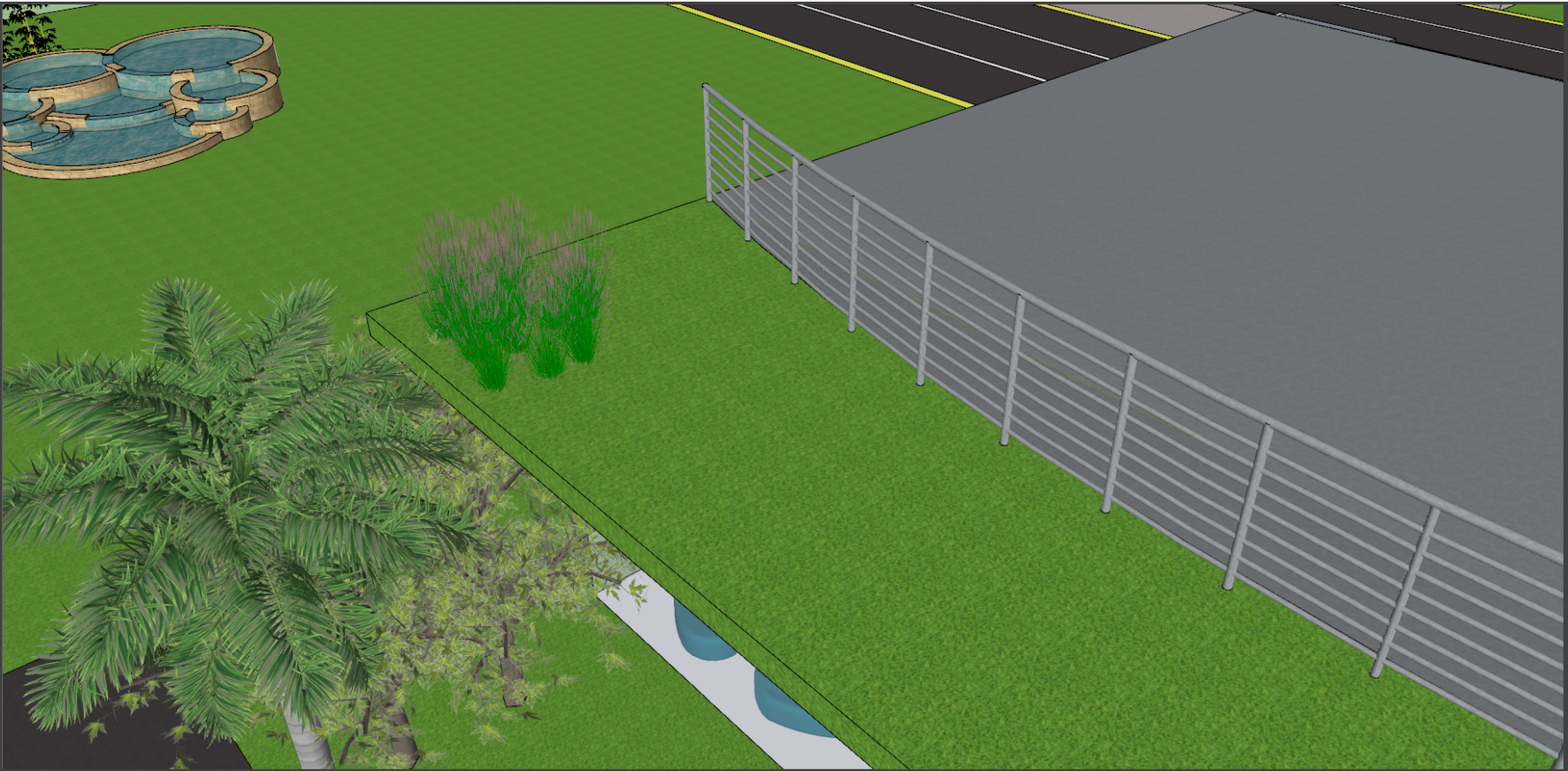
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Experimental Group: Time

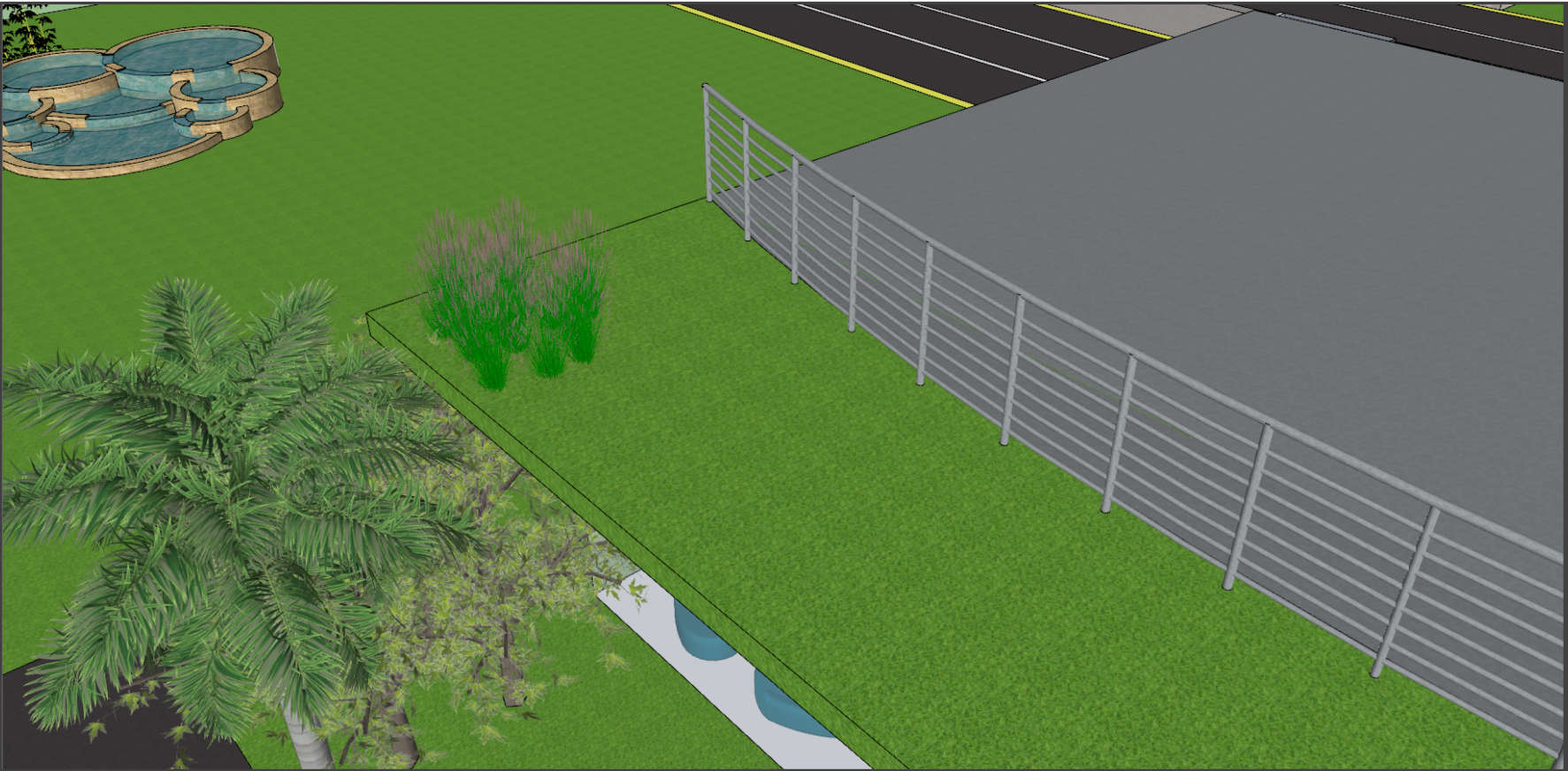
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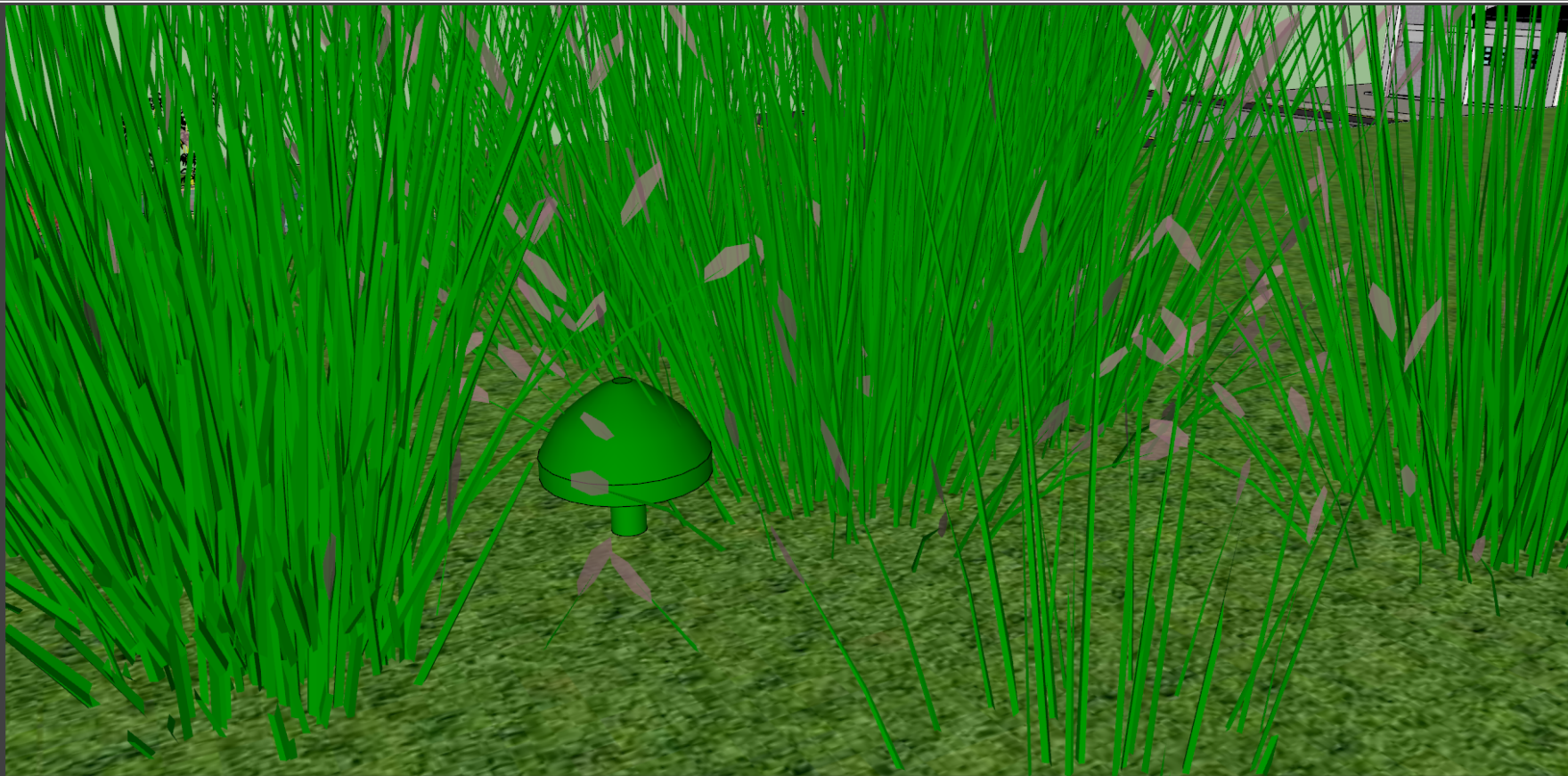
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Cyber: Which Int?

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Cyber: GEOINT?

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Cyber: DIGINT?

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Cyber:
OSINT?

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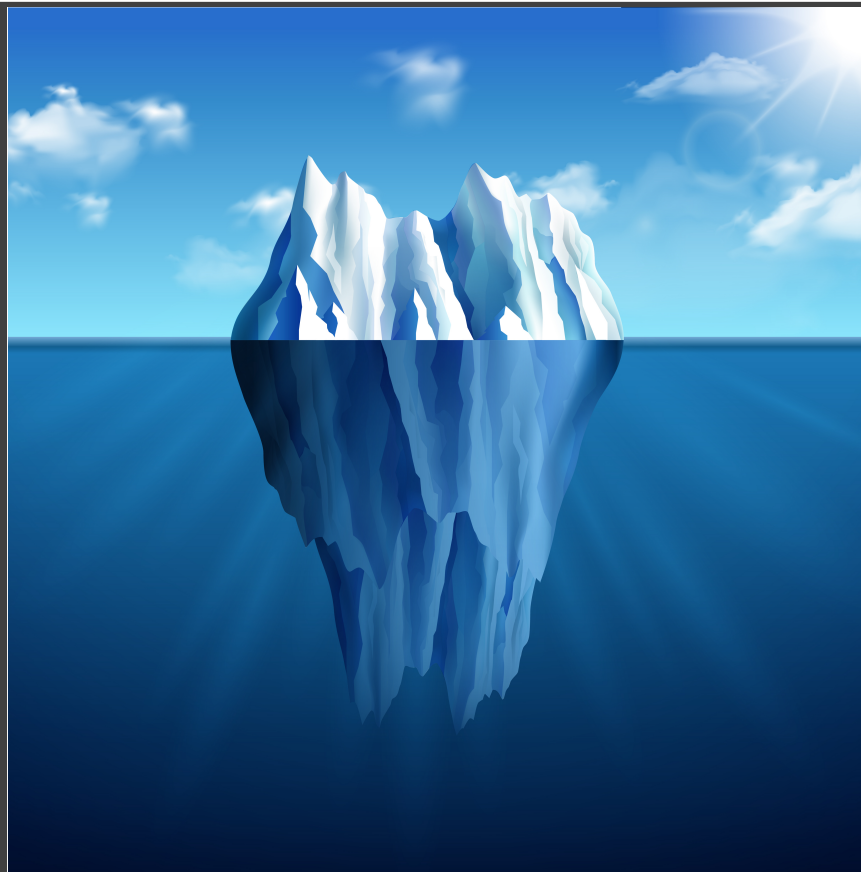
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Cyber: WEBINT?

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Cyber: MASINT?

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Testing Results

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Some Thematics from IARIA 2019

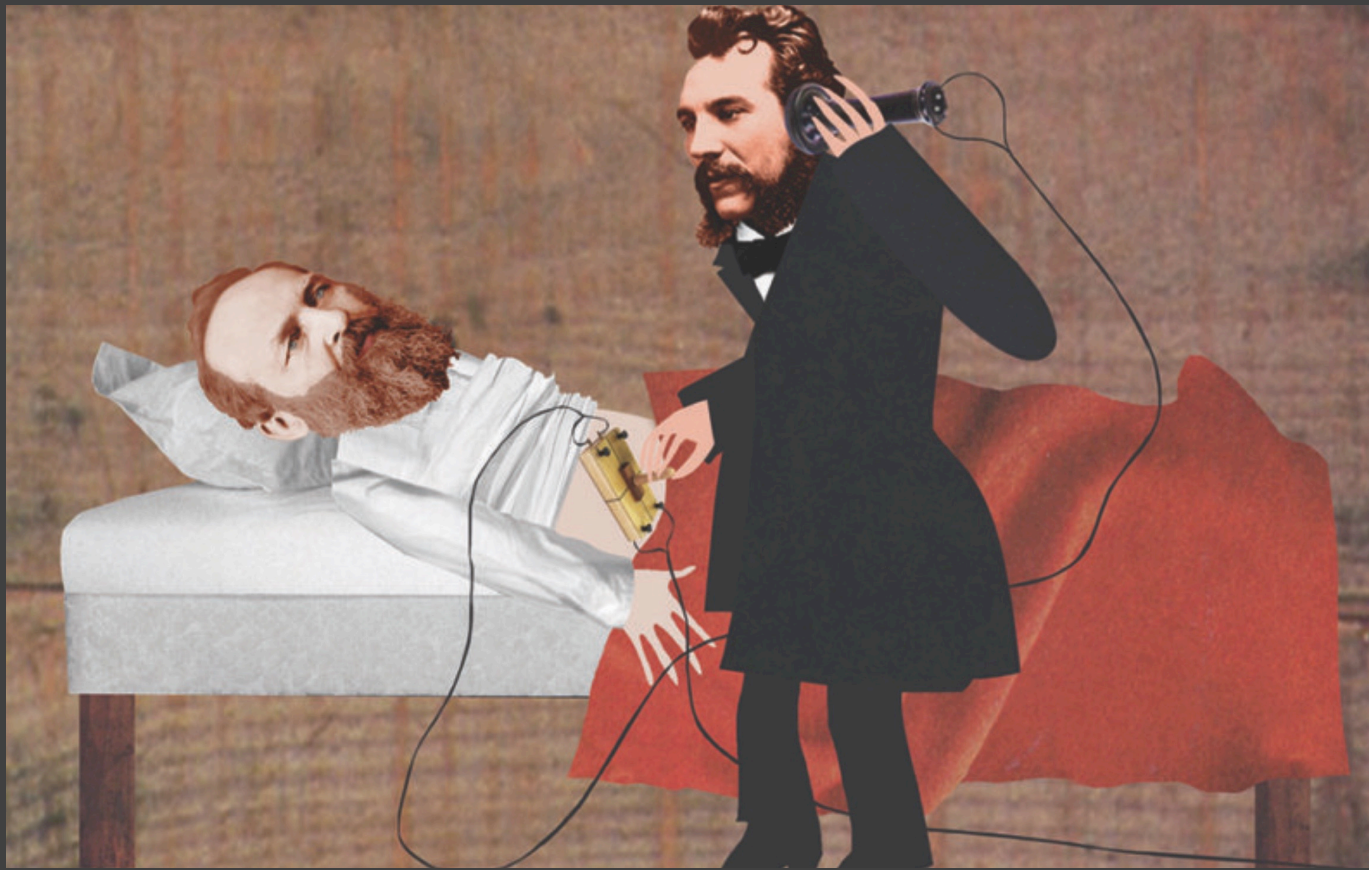
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Thematic #1: Context Matters

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Thematic #2: Multi-Domain Collaboration

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Thank you!
Questions?

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