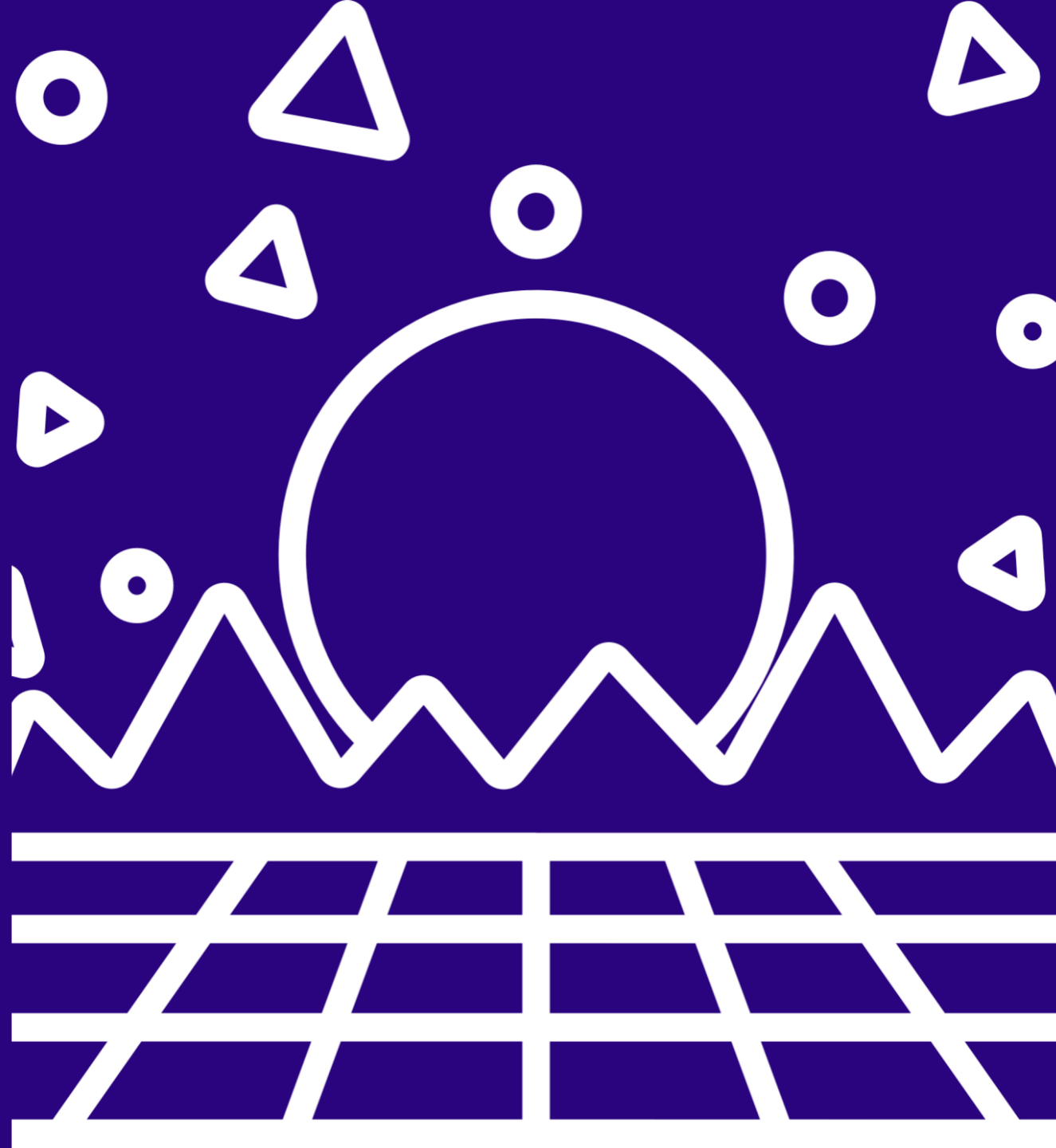# The Give & Take of Innovation & Security

Nicole Little (she/her)
Head of Piracy, Fraud, & Abuse – Amazon Prime Video

Intro

Nicole Little

Head of Piracy, Fraud, & Abuse – Amazon Prime Video

Industry background

- 16 years of content protection advocacy, copyright enforcement and policy guidance, and technology security assessment. Fascinated with the constant tide of technology innovation and how it's applied to content creation and distribution.
- DRM & Security Circumvention Expert
- Technical Analysis & Education

About Me
EMBA '23 Student at UCLA Anderson
20 years in the hacking community
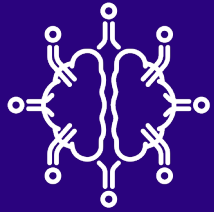
Hobbies
Security research - RSA Hackers & Threats Program Committee
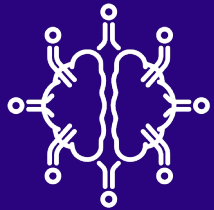Biohacking (Ask me about my microchip implants!)

Agenda

- ✴ Future-facing Content Creation & Distribution

- ✴ Security Concerns & Tradeoffs
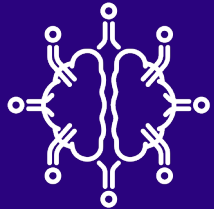
- ✴ So What? Topic Review

By the end of this session you should be able to:

Understand the application of emerging technologies like AI-generated creative works or Web3 (and Blockchain) to current content creation and distribution.

Understand the security concerns associated with developing technology in these emerging spaces
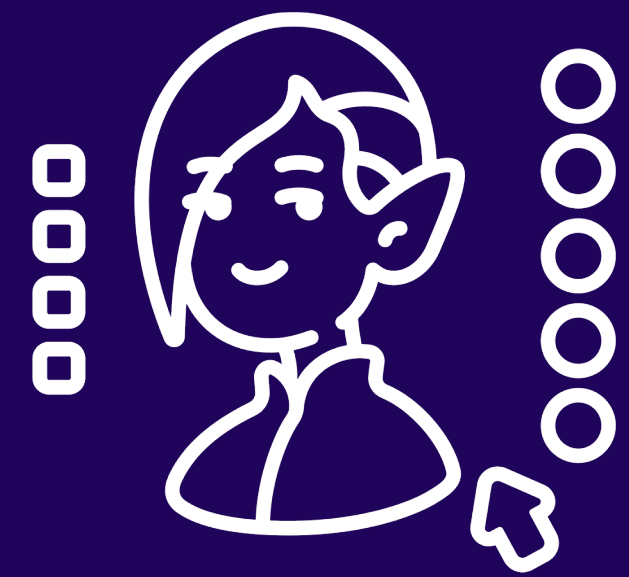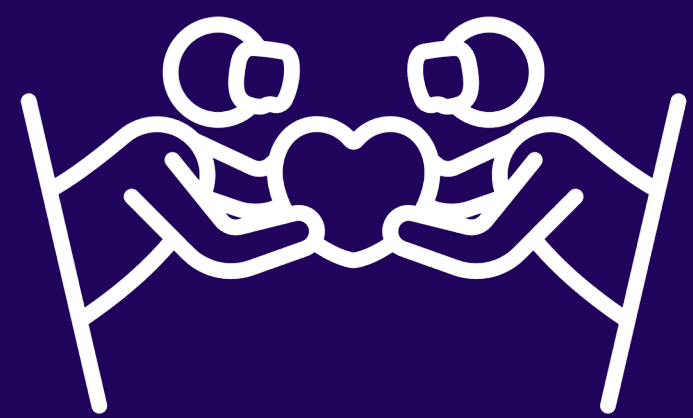
Understand when to apply intellectual property considerations and security frameworks to content creation and distribution.

Technology and innovation move at an astounding pace, ushering in new ideas and modalities every day

Each exciting step forward uncovers new and potentially unknowable avenues for exploration and creation

Therefore, we must take care when we engage in this space, considering the long-reaching impacts of our creative efforts and the precedents we set in our exploration.
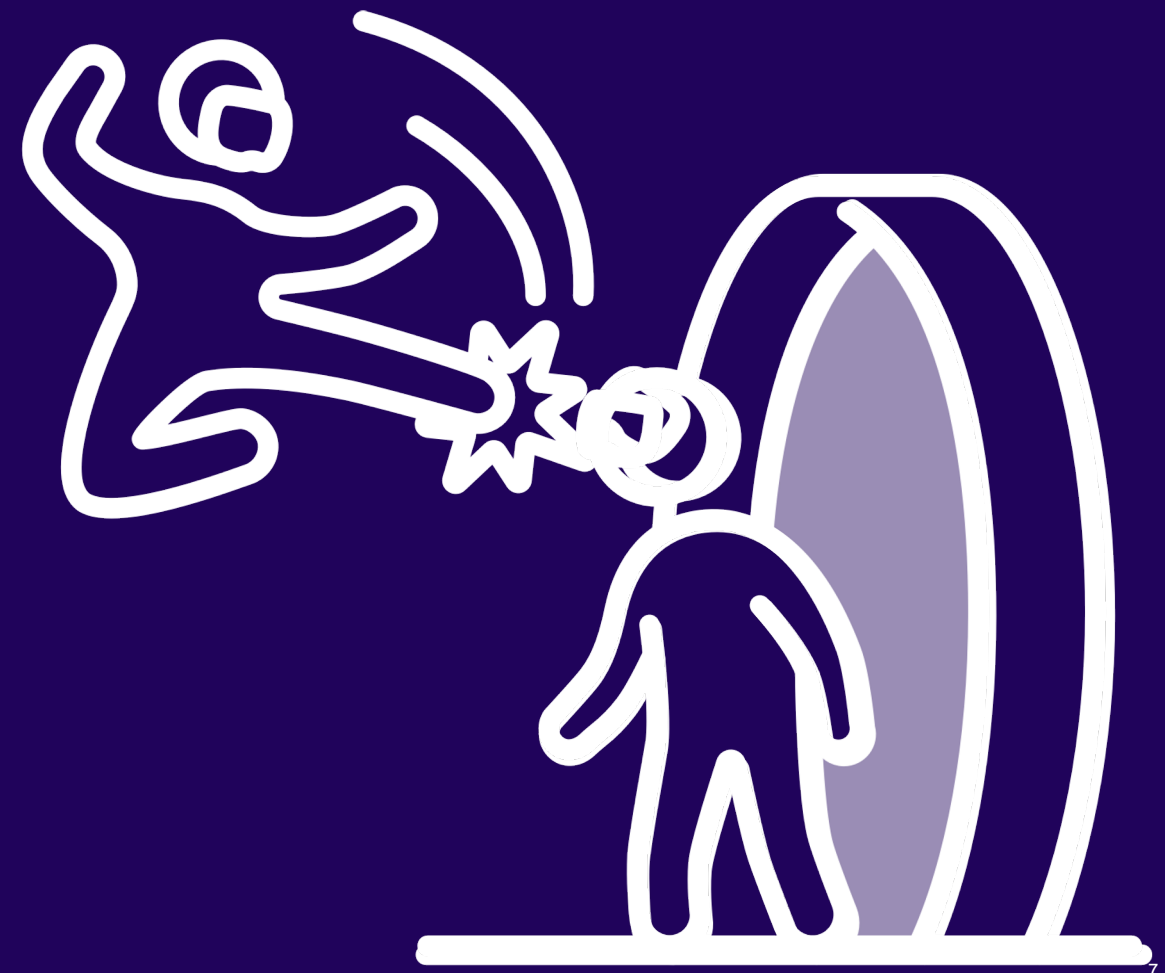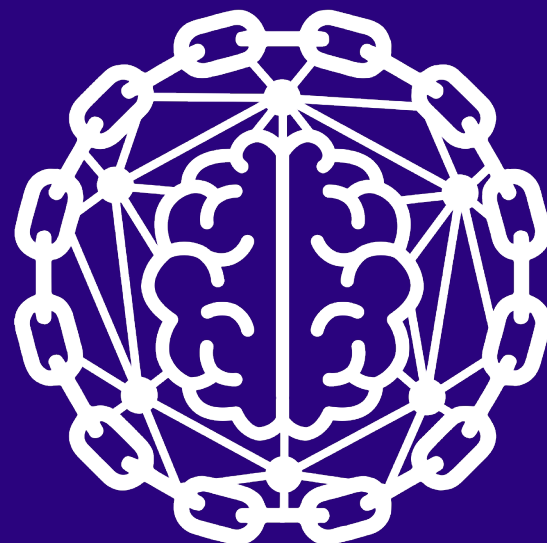
The Give of Innovation

Future-Facing Content Creation & Distribution
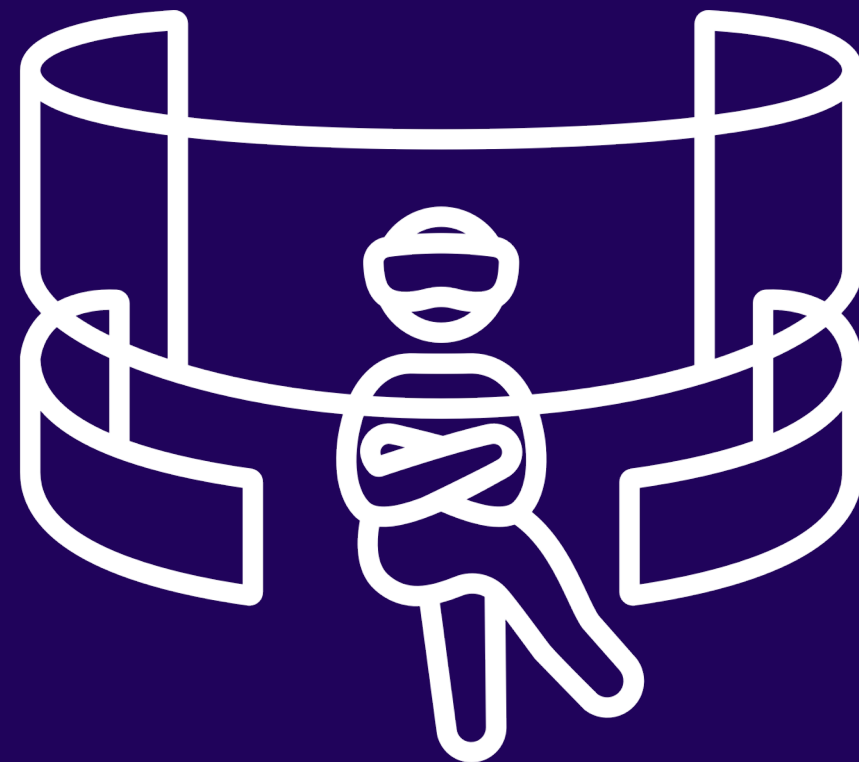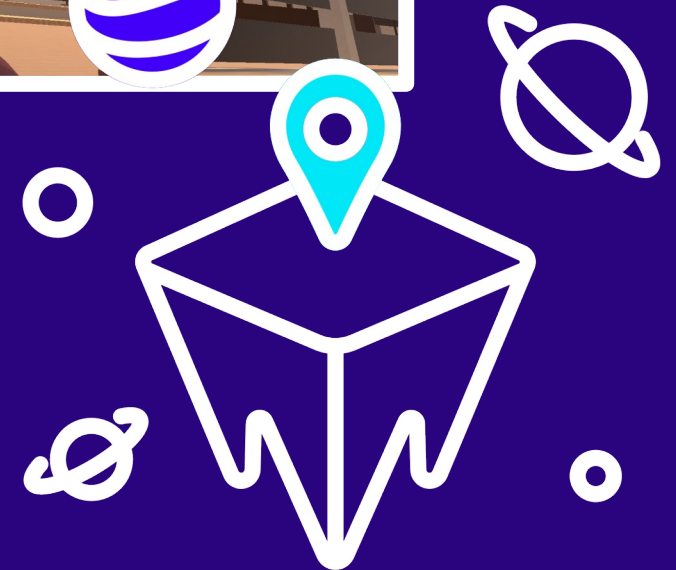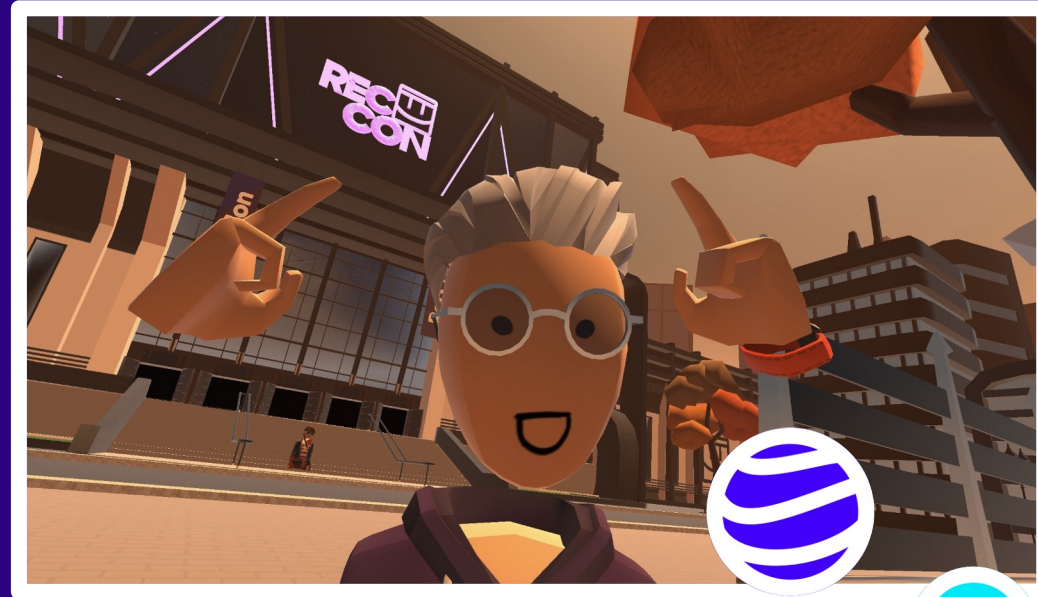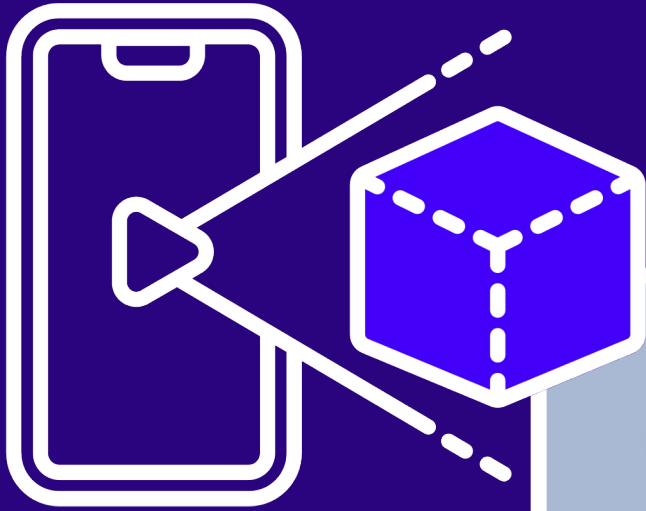
The metaverse

Blockchain

AI Generation

" He's in a **computer-generated universe** that his computer is drawing onto his goggles and pumping into his earphones. In the lingo, this imaginary place is known as **the Metaverse**. "
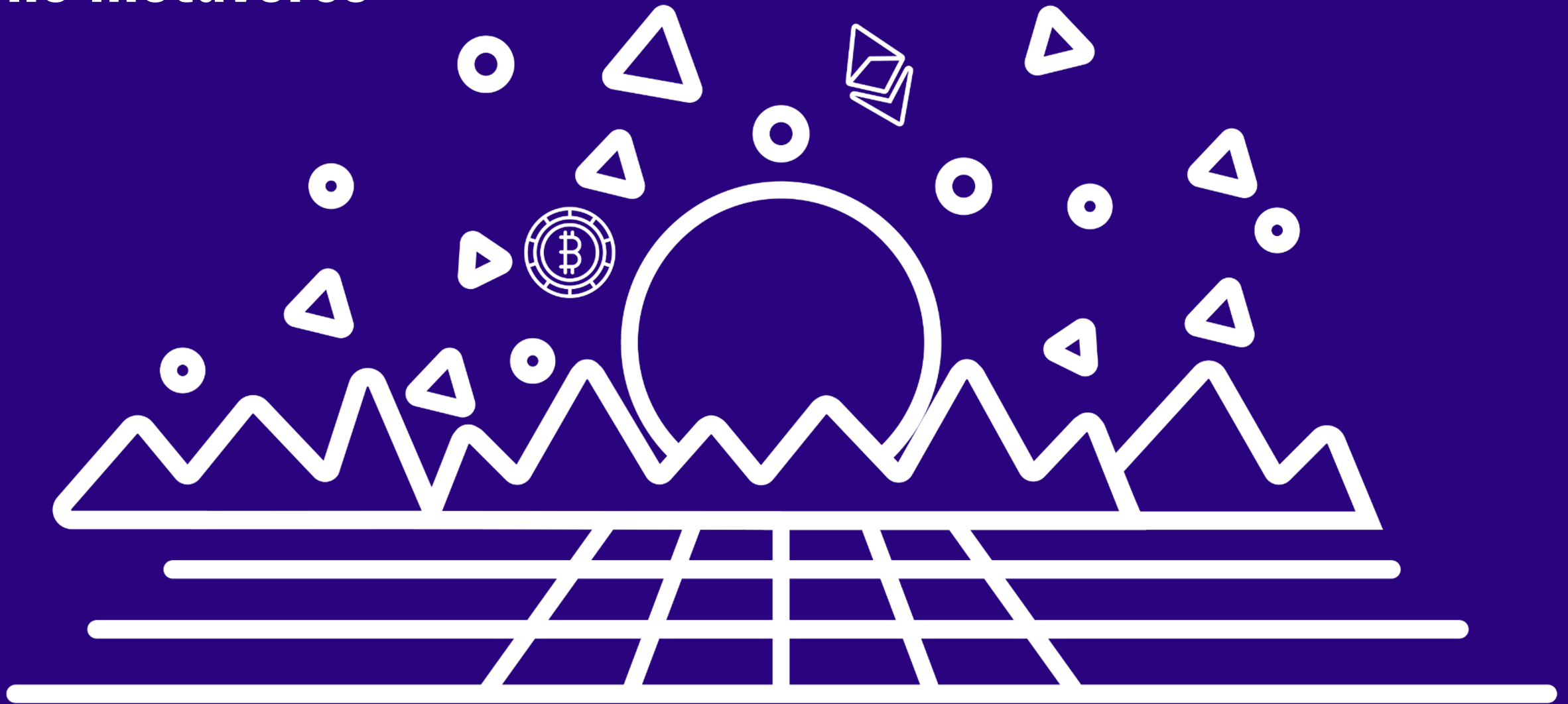
Neal Stephenson
Author – "Snow Crash", 1991
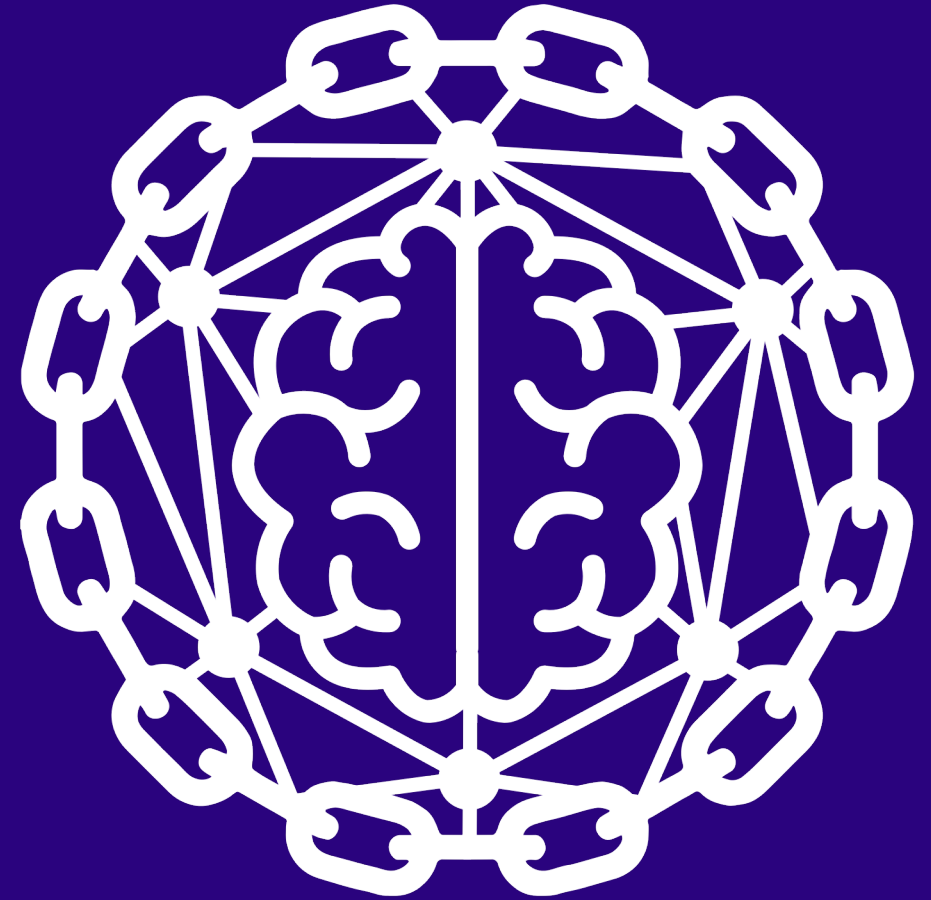
The metaverse

The metaverse

Blockchain

Blockchain

Pros

Novel distribution framework

New methods of watermarking digital assets

Vastly scalable, trackable, and more performant than traditional distribution methods

Cons

Environmentally negative

Typically requires users to establish and use a protocol-specific wallet

Astronomically high bar for consumer adoption

Web3

- Web3 is the advancement from Web 2.0 to a newer decentralized form of the Internet

- Blockchain-based

- Underlying tech for the metaverse

- The backbone of NFT creation and distribution

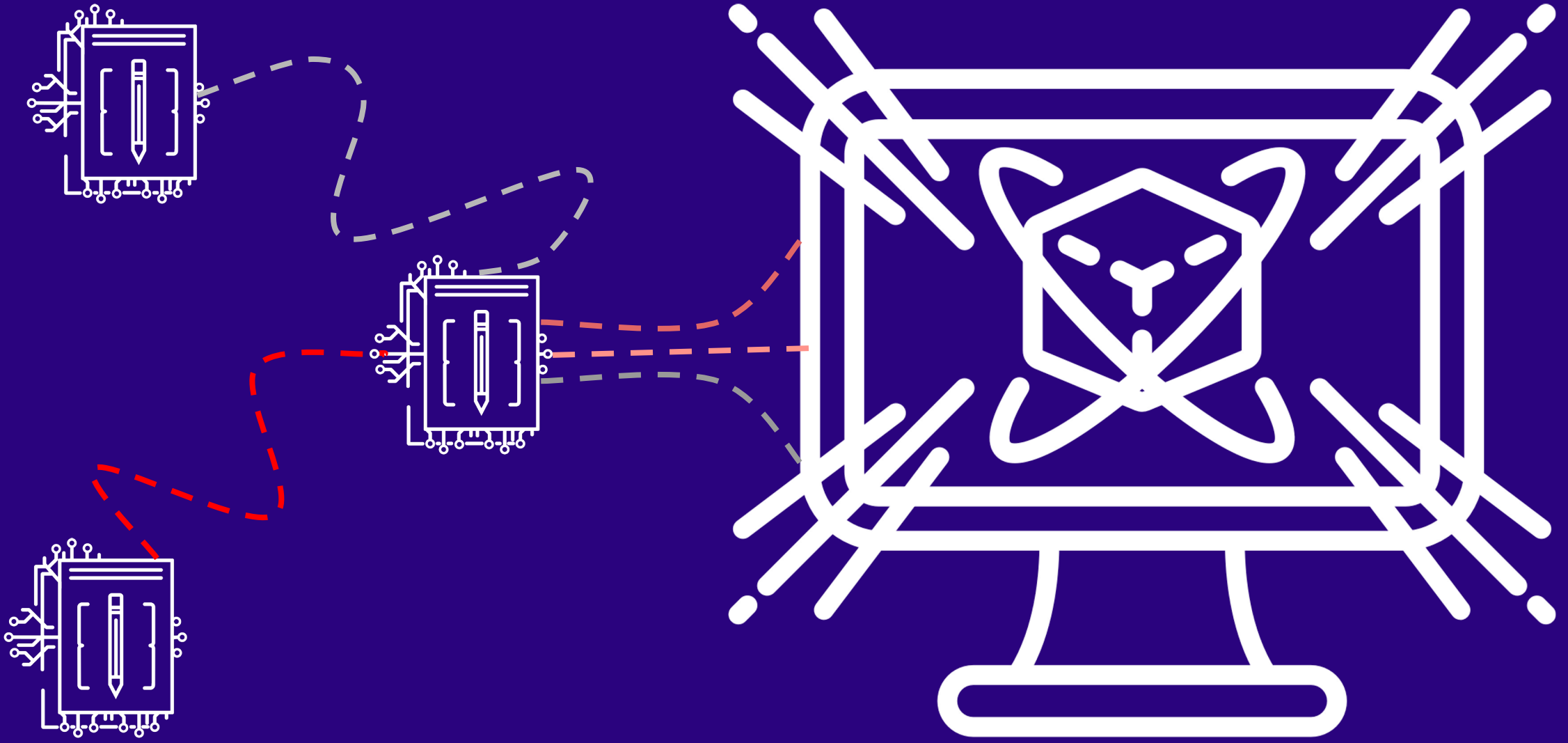It's still just the internet
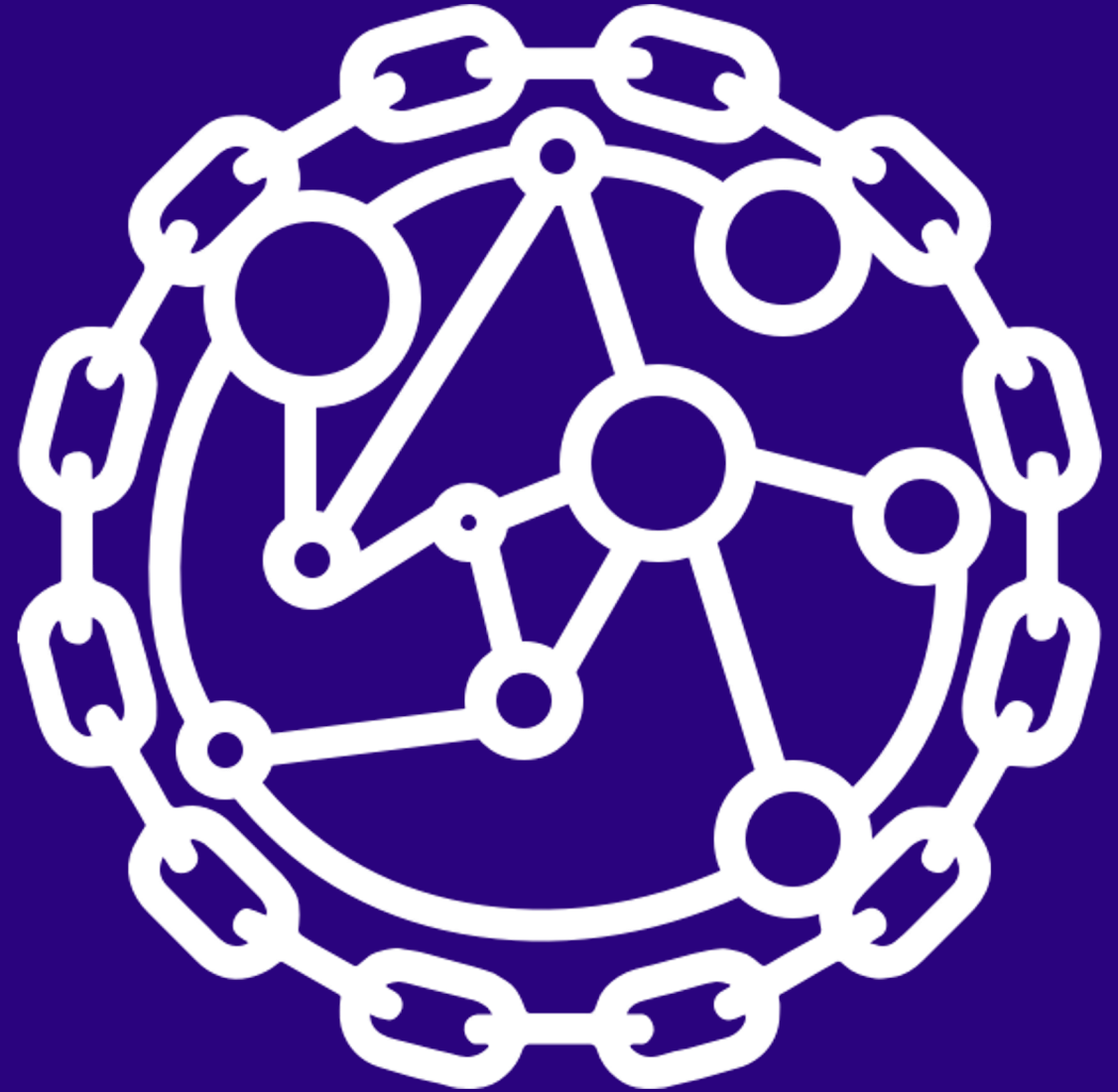
AI Generation
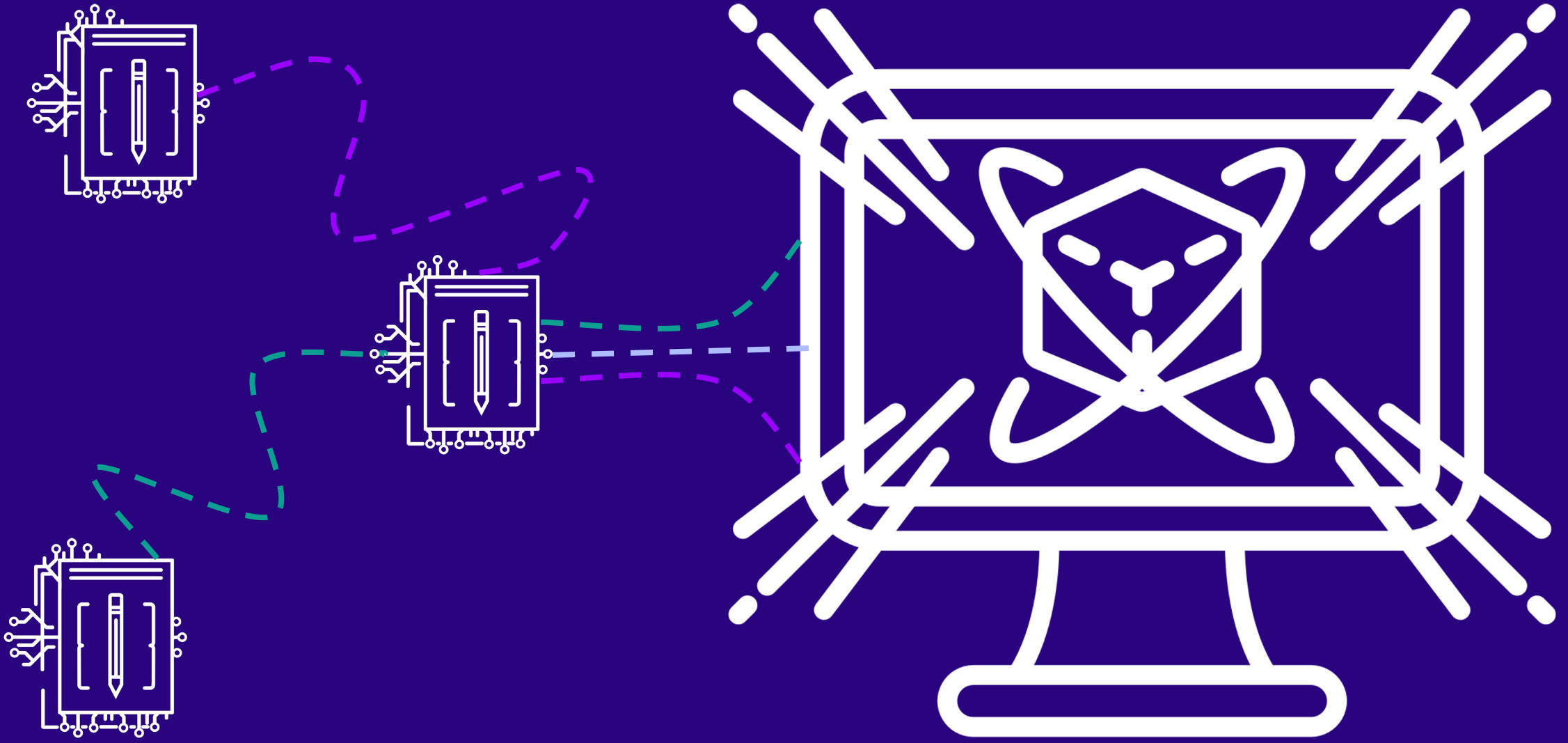
AI Generation

The Take of Security

Considerations For a More Secure Innovation

- Intellectual Property rights and ownership
- Application security
- Data Privacy
- Consumer Experience and Safety
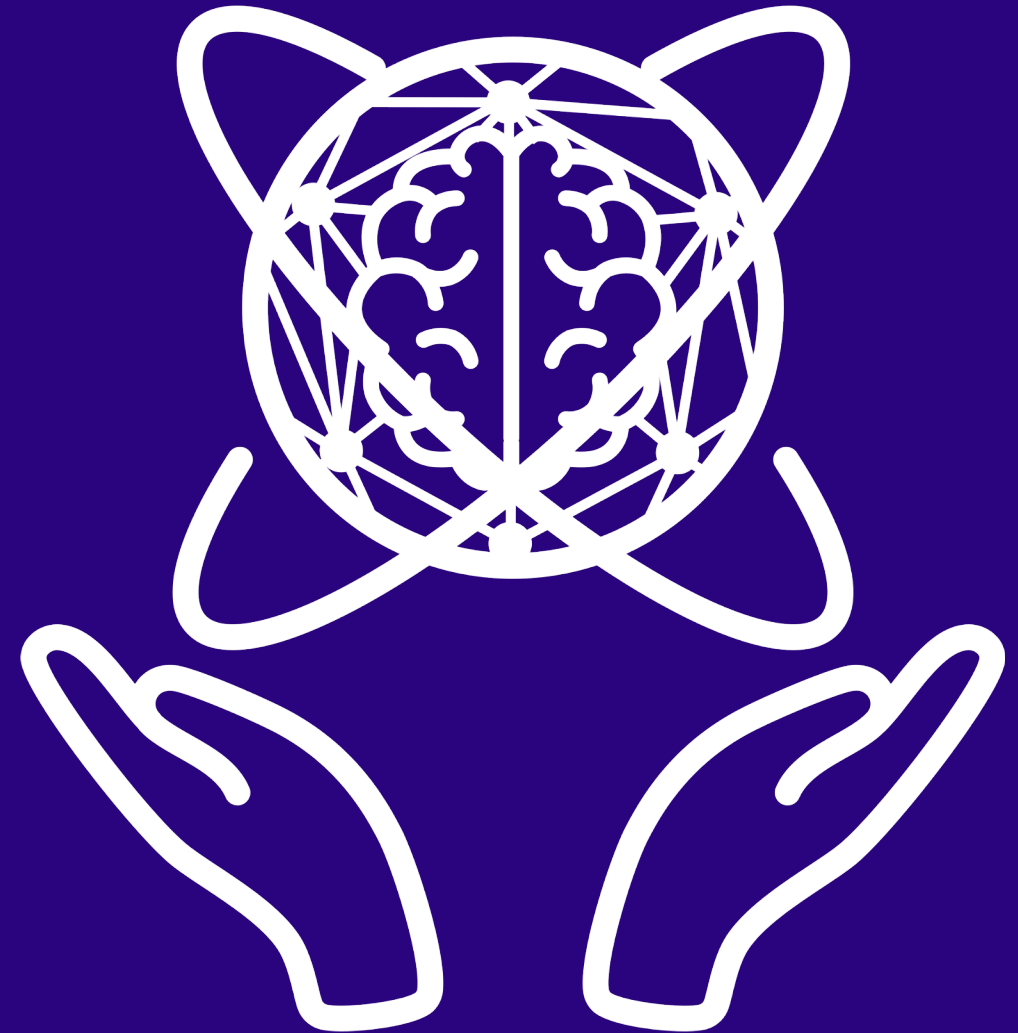
Intellectual Property

Who Even Owns This???

- As with any distribution of digital assets, people will find a way to steal and redistribute your content, but now with distribution via metaverse marketplaces or Blockchain-based Web3 environments, how do you know what's legit and what's not?

- Did you use an AI to create your final asset? How much of your work is actually yours? Was the AI you used trained on licensed or permitted data sets?

Application Security

- What kind of data security measures do your vendors and partners have in place?

- What kind of application security reviews does your company have in place? Does it review apps from the customer perspective or only from an internal engineering view?

- Are your customers at risk of scams or fraud because of the actions (or lack thereof) of your vendors?

Data Privacy

- Biometric data collection

- Data & security architectures of applications used to distribute or support content creation

- New third-party vendor platforms handling sensitive or pre-release content

- Image recognition and scanning in apps
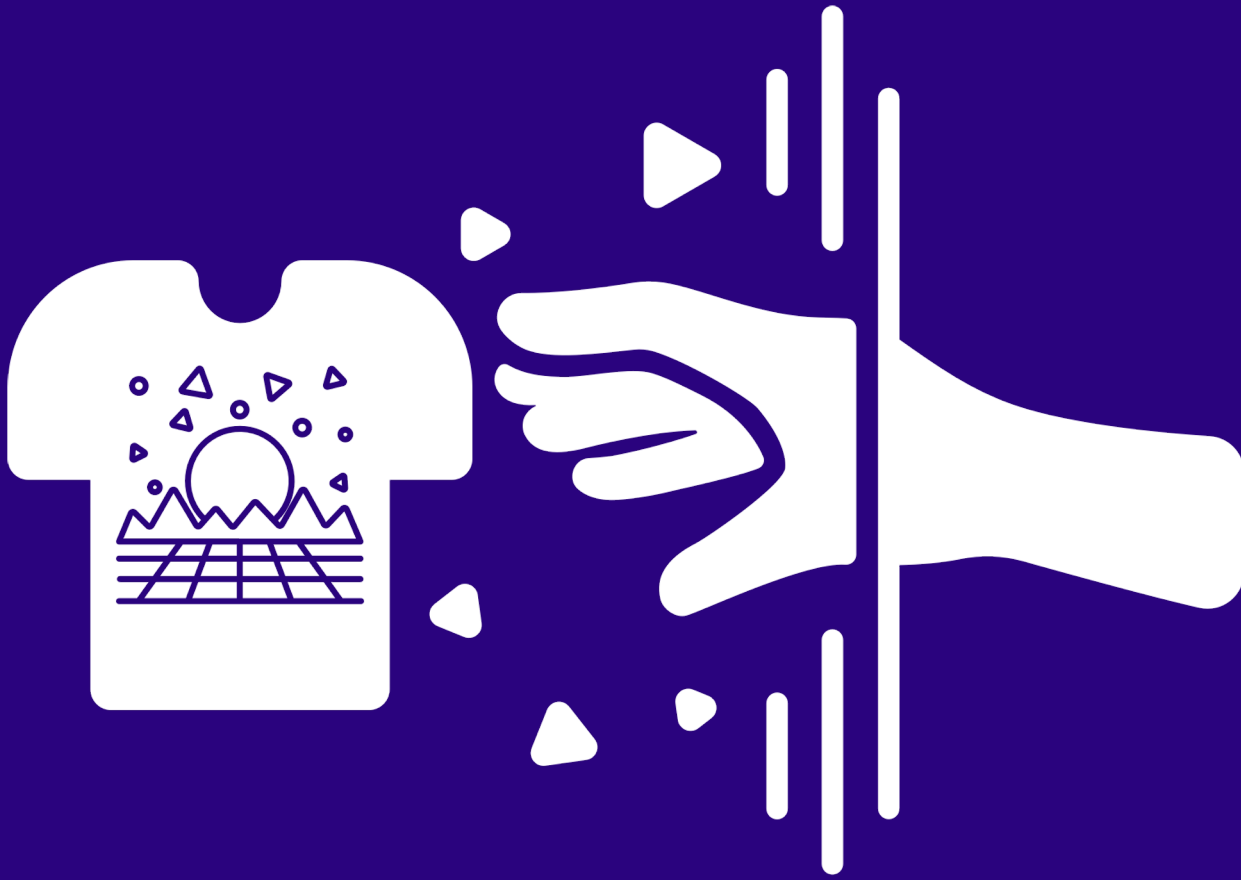
Consumer Experience

- Customer Data Privacy

- Customer Experience & Moderation in hosted spaces

- Security of customer assets and transactions

So What?

Despite the evolution of the tech, the same types of security threats exist, with new and exciting avenues for exploitation and potential impact

When to Request or Seek Security or Legal Guidance

Any project or proposal that will manage, distribute, or otherwise handle sensitive assets, ask yourself the following:

- Have you coordinated a security engineering application review & assessment?

- Have you discussed the potential impacts and concerns with your legal team?

- Will your project collect or utilize customer data, images, or details to facilitate its use or produce a final product?

Thank you!

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Connect with me on LinkedIn: