SOLUTION BRIEF swear.com

PROOF OF AUTHENTICITY FOR DIGITAL CONTENT

AN IMMINENT THREAT:

Misinformation threatens the integrity of the global information eco-system. Generative AI is advancing the creation of hyper-realistic digital forgeries...and they are growing at over 900% each year. These synthetic recordings (deepfakes) can be weaponized to blackmail, extort, prosecute, damage reputations, incite conflict, increase exposure, and manipulate.

Unfortunately, defensive/forensic methods (identifyand-discredit) alone will not solve this growing threat as generative AI created synthetic media accelerates.

An end-to-end solution is needed to transparently protect the authenticity of digital content from the precise moment it is recorded until it is viewed.

THE SWEAR SOLUTION:

Swear's patented framework solves the problem by creating digital assets that can't be counterfeited.

Our patented framework fingerprints and maps digital media within a Web3.0 blockchain network. We protect every pixel and sound bite – frame-by-frame and second-by-second...in <u>real-time</u>.

The Swear solutions provide a chain-of-custody to protect digital assets from the point of capture until the point of examination. We not only protect what was recorded, but also authenticate when, where, and who created the original content.

PRIVACY MAINTAINED:

All digital assets are protected in-place and never leave your infrastructure – only the fingerprints are secured in an independent blockchain ledger.

PROBLEM SOLVED:

Swear's solutions help organizations protect and prove the authenticity of their digital assets.

KEY FEATURES:

- All visual and audio elements are mapped with dimensions of attribution data to construct digital DNA fingerprints, during recording.
- Distributed blockchain technology preserves the integrity of DNA fingerprints with an independent and immutable chain-of-custody.
- Authenticity of surveillance media can be verified by comparing it to the original DNA second-by-second and frame-by-frame.
- Pixel level precision if a single pixel is altered or a sub-second of sound modified, Swear identifies the counterfeit content.

ROBUST INTELLECTUAL PROPERTY:

Swear's patent portfolio consists of foundational patents at the intersection of blockchain and digital media provenance:

- U.S. Patent #10,348,505 Systems and techniques for validation of trusted media
- U.S. Patent #10,355,865 Systems and techniques for certification of trusted media
- U.S. Patent #10,560,261 Systems and techniques for capture of trusted media
- U.S. Patent #10,853,456 Authenticating media data based on steganographic methods
- U.S. Patent #11,055,384 Certifying media data based on steganographic and blockchain
- U.S. Patent #11,163,855 Validating media data based on steganographic and blockchain
- U.S. Patent #11,659,598 Authenticating media data based upon metadata encoding
- U.S. Patent #11,683,180 Protecting digital media with nested hashing techniques
- Pending patents



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REAL-TIME BLOCKCHAIN PROTECTION OF VIDEO FOR UNBREAKABLE CHAIN OF CUSTODY

THE SWEAR FRAMEWORK

APTUR

Capture video, audio, and images.

---1

Collect customizable dimensions of attribution analytics and metadata.

---2

Network

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ND 13 Use steganographic techniques to watermark attribution metadata directly into the digital media.



Create cryptographic fingerprints to map every frame, pixel, sound bite, and all ____ layers of attribution metadata.





OTEC

Permanently preserve the cryptographic fingerprints into an independent and immutable blockchain ledger.





Inspect previously recorded content.





PECT

Reconstruct the cryptographic fingerprints using both the digital content and the attribution data.





Obtain the original cryptographic fingerprints on the blockchain ledger.











Compare the fingerprints of the original recording with the fingerprints of the evaluated recording – frame-by-frame and second-by-second.



Network Time

n Device

Sound

Swear provides unbreakable chain-of-custody for digital media. Our patented solutions permanently protect the authenticity of digital content, in real-time, with immutable blockchain security.

