

Preserving History: A Cryptographically Signed Media Archive

Protecting the Past from AI-Generated Distortion

1 The Problem: AI Threatens Historical Truth

In an era where artificial intelligence can generate hyper-realistic videos, images, and texts, distinguishing authentic historical records from fabricated content is becoming impossible. By 2030, AI-generated media could flood archives, social platforms, and public discourse, eroding trust in historical accounts. Without a reliable way to verify the authenticity of media, future generations risk losing a clear grip on the past, undermining our ability to learn from history.

2 Our Solution: A Trusted Media Archive

We propose a **cryptographically signed collection of historical media** to preserve the integrity of today's records. By downloading videos, images, and texts (e.g., from platforms like YouTube), storing them in secure cloud storage (AWS S3), and applying digital signatures with timestamps, we create a verifiable archive. Each file is hashed and signed with a private key, ensuring its authenticity and linking it to a specific date. Metadata is stored in a database for easy access, and signatures can be verified by anyone using a public key.

3 Why This Matters

- **Preserving Truth:** Cryptographic signatures provide undeniable proof that media files are unaltered, safeguarding historical accuracy against AI manipulation.
- **Future-Proofing History:** A trusted archive ensures that researchers, historians, and the public can rely on authentic records.
- **Community Impact:** This open-source initiative empowers global collaboration to document and protect our shared history.
- **Scalable and Accessible:** Built with modern tools (Python, AWS, SQLite), the system is cost-effective and adaptable for institutions and individuals.

4 Join the Effort

We need historians, developers, archivists, and advocates to help build and expand this archive. Your expertise can:

- Curate significant media from diverse sources.
- Develop tools for downloading, signing, and verifying files.
- Promote the archive to ensure widespread adoption.

Get Involved: Contact us at preservehistory@example.com or visit github.com/preserve-history to contribute to this open-source project. Together, we can protect the past for future generations.

Created on May 25, 2025. Lets secure history, one signature at a time.