



# Timestamping with OpenTimestamps

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# Introduction to Timestamping

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# What is timestamping?

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- Ascertaining an accurate date on a document

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- (Italian) law requires that dates on important documents be ascertained by a public official

# What is timestamping?

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- Ascertaining an accurate date on a document
- (Italian) law requires that dates on important documents be ascertained by a public official
- What about digital documents?

# What is digital timestamping?

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- Based on a third-party digital signature

# What is digital timestamping?

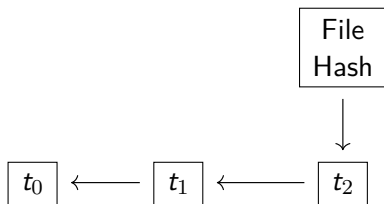
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- Based on a third-party digital signature
- Based on a certification authority

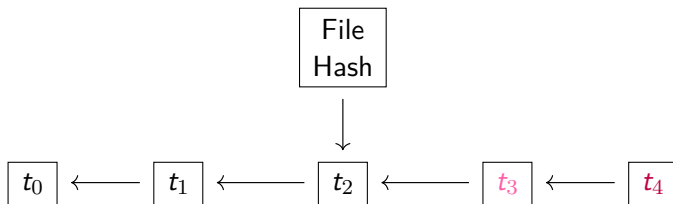
# **Timestamping and Blockchain**

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## How can we use the Blockchain for timestamping?



## How can we use the Blockchain for timestamping?



# Why the Blockchain?

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- Safe

# Why the Blockchain?

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- Safe
- Open

# Why the Blockchain?

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- Safe
- Open
- Cheap

# OpenTimestamps

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## Why OpenTimestamps?

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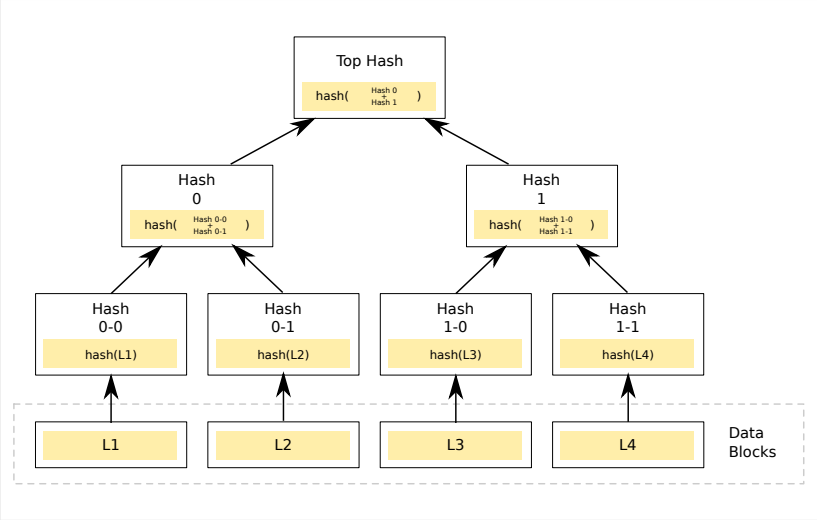
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  - Merkle Tree

# Merkle Tree



**Questions?**

## Examples of OpenTimestamps usage

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- [opentimestamps.org](https://opentimestamps.org)
- [proofmode.org](https://proofmode.org)
- [ansiacheck.bellworld.it](https://ansiacheck.bellworld.it)

Proofmode helps anyone capture and verify smartphone photos and videos of actual reality.

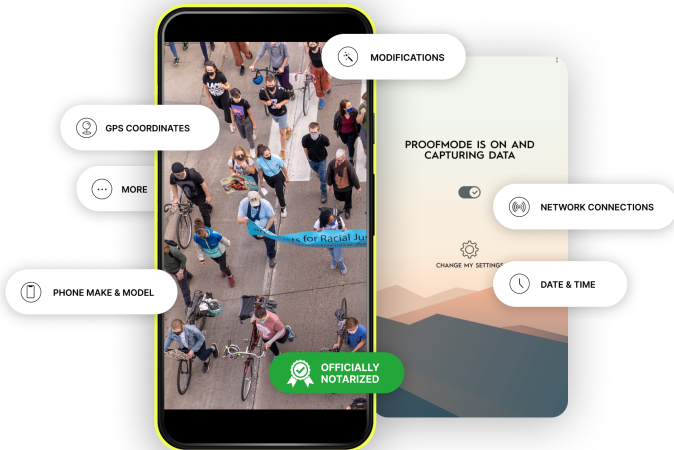
It enhances trusted visual metadata, authenticates camera hardware, cryptographically signs content, and uses third-party notaries for a decentralized, privacy-focused chain of custody.

In short, it helps people know your photos and videos are really real.

"We believe in a future, where every camera will have a 'Proof Mode' that can be enabled and every viewer an ability to verify-then-trust what they are seeing."

- Sam Gregory, Witness.org 2013

# Proofmode



**The End**

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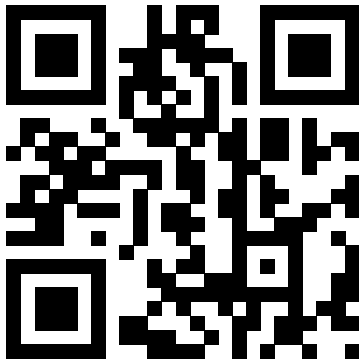
**Thank you for your attention!**

**If you have any questions or would like to chat  
more,  
feel free to reach out or talk to me after the  
session.**

**I'll be happy to continue the conversation!**

# Summary

For more information see [opentimestamps.org](https://opentimestamps.org).



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