

A decorative graphic on the left side of the slide consisting of several overlapping circles of varying sizes, some with internal lines, creating a complex, layered pattern.

# Digital Statues

*A collaborative project*

**Pröstur Thor Bragason**

New Media specialist at EFLA

M.Sc. Medialogy

A.Sc. Computer Animation



## About

*Pröstur Thor Bragason*

- Graduated from Full Sail's Computer Animation in 2002
- M.Sc. in Medialogy from Aalborg University in Copenhagen 2006.
- Joined EFLA Consulting Engineers in 2017.
- Partner at EFLA Consulting Engineers in 2021
- EPIC Megagrants recipient 2020
- Digital Twin evangelist
- First heard about photogrammetry around 2006.





## What is the Digital Statues project?

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- A collaborative project that started as a chance visit to the Einar Jónsson Sculpture Museum
- Einar Jónsson's statues, photographed and processed to create exact digital twins of each statue in the museum and around the city of Reykjavik.
- The main objective is to get the art of Einar Jónsson to all school kids, regardless of their location.
- Also a great way to celebrate the museum's 100th anniversary.
- Study materials for students to learn more about the artist and also to

## How did we get started?

- Barnameningarsjóður (children's culture fund) supported the project for two years in a row
- [Vernd](#)
- [Útlagar](#)
- List fyrir alla (art for everyone) supported the project for one year
- And then we started working...



## Digital twins – real world application

*Using digital twins to study weathering and vandalism*

- The Jón Sigurðsson monument
  - Client: Listasafn Reykjavíkur
  - Opportunity: Provide static “health” report on statue.
  - Challenge: random vandals
- [Jón Sigurðsson digital twin](#)
  - [Ingólfur Arnarson digital twin](#)

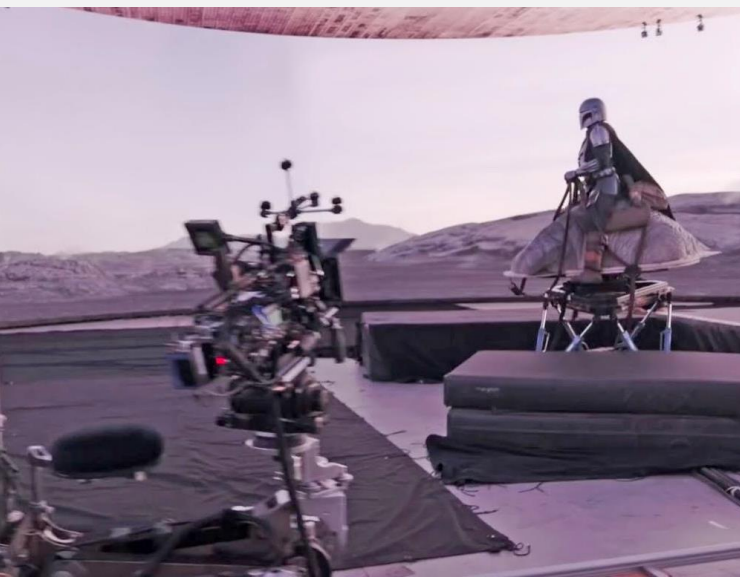


## Status of digital twins in other fields

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### *Media and Entertainment*

- Virtual production
  - Computer games
  - Live broadcast (sports)
  - Empowering teams all over the globe
- [https://efla.nira.app/a/PykYBc0DQZaCv\\_1aNwNkkgg/1](https://efla.nira.app/a/PykYBc0DQZaCv_1aNwNkkgg/1)
  - <https://efla.nira.app/a/bCtAZ9AzS9q5XaOXQI4OCQ/1>
  - <https://efla.nira.app/a/uBIYq91dQuSTQZRFA-2qJA/2>
  - <https://efla.nira.app/a/XwEs2zEWRbOrHGreINex0g/1>

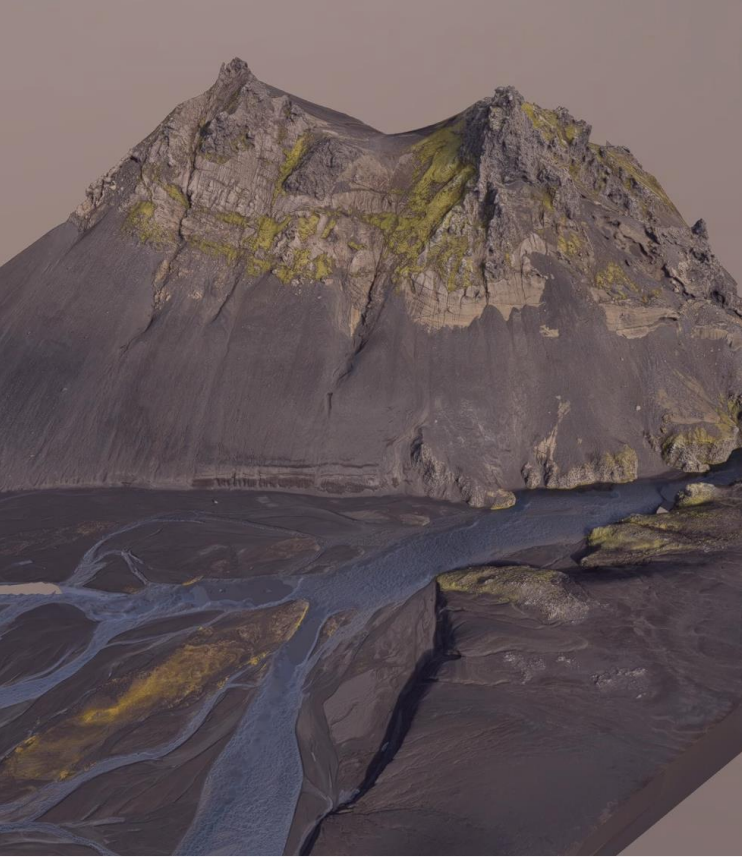


# How are we using digital twins in daily lives

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- Preparing and monitoring progress on construction sites
  - Information sharing
  - Decision making in planning/design
  - Improved access to information, regardless of location
- [https://efla.nira.app/a/PykYBc0DQZaCv\\_1aNwNkkgg/1](https://efla.nira.app/a/PykYBc0DQZaCv_1aNwNkkgg/1)
  - <https://efla.nira.app/a/bCtAZ9AzS9q5XaOXQI4OCQ/1>
  - <https://efla.nira.app/a/uBIYq91dQuSTQZRFA-2qJA/2>
  - <https://efla.nira.app/a/XwEs2zEWRbOrHGrelNex0g/1>



## Are we there yet?

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*EFLA's ongoing commitment to Digital Twins*

- Granni – a real time database for municipalities
- Scanning / processing
- Media
- Collaboration / dialogue with companies, cities, municipalities, governments, foreign and domestic.



# Opportunities and challenges in digital twins

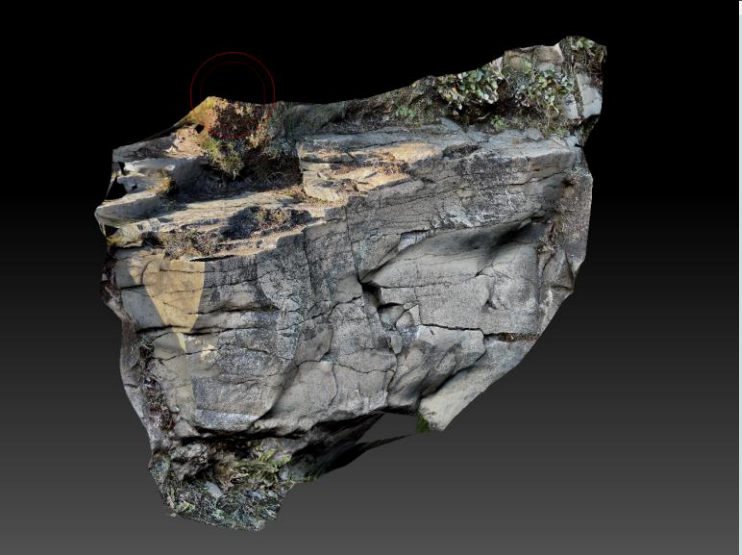
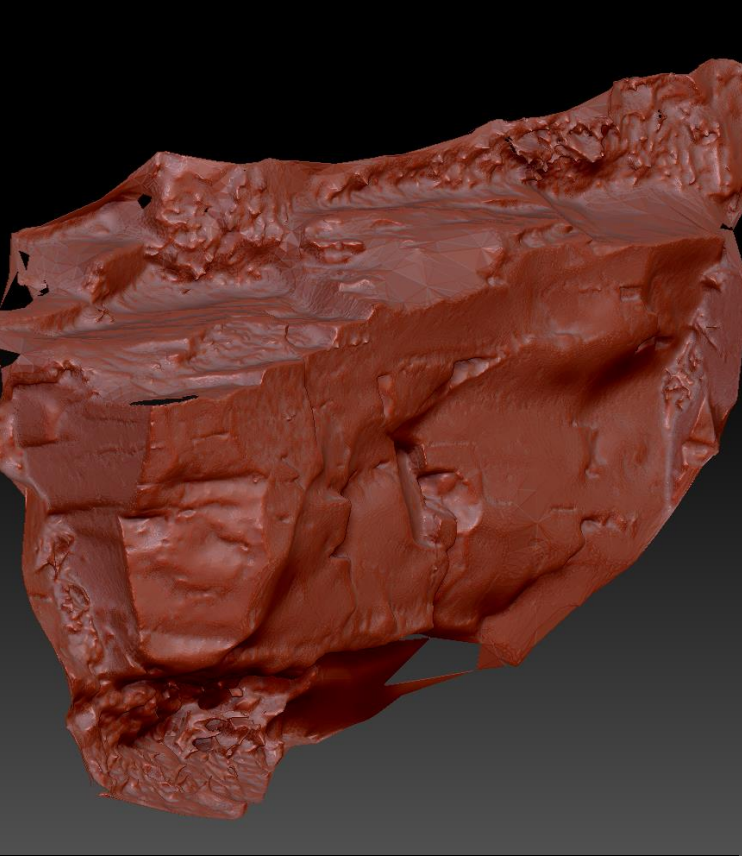
Historical challenges in capturing people's likeness (photography)

Moral challenges of digital twins and the "industries"

Time saving and iteration friendly

Artist friendly (no, really)

- This assumes that digital twins were created at least partially through human input, be it through capturing images or programming of tools that help users "unleash" their creative side.
- Runs risk of everything looking like it was from Megascans library (or other "bank")



- Blikastaðaland:

<https://bit.ly/40yaVDI>

- Borgarhöfði:

<https://bit.ly/40yaVDI>

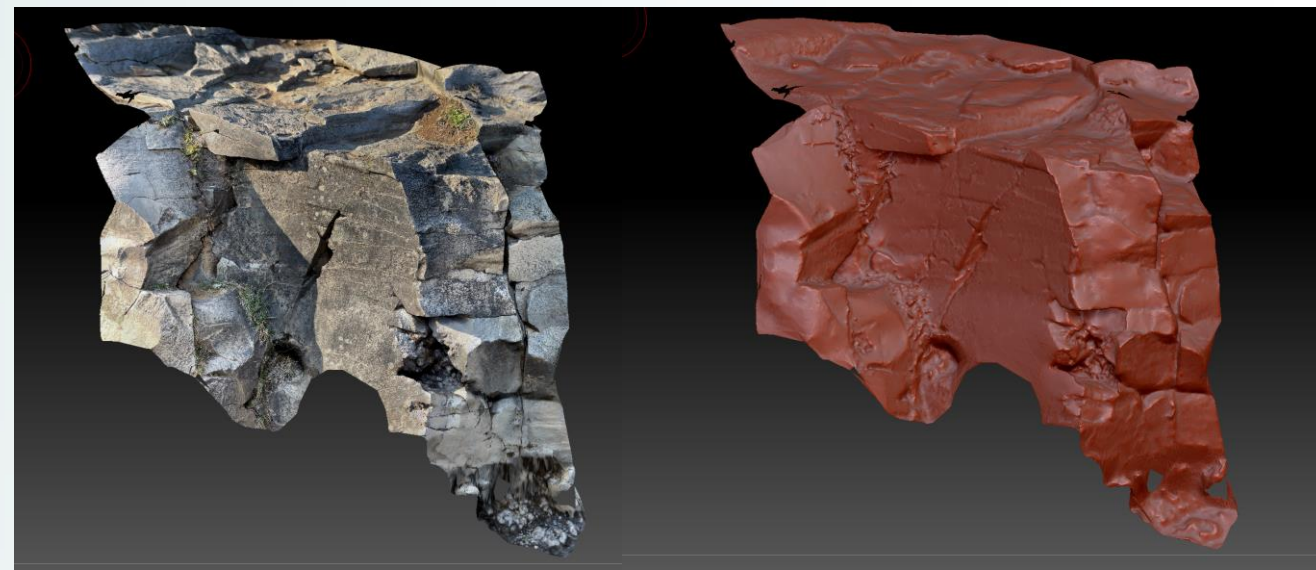
- Listasafn Einars Jónssonar:

<https://sketchfab.com/ListasafnEinars/models>

- Scanning for the sake of scanning:

<https://skfb.ly/oKI9O>

## Examples of digital twins in the civil engineering world.



## Final thought and questions

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