

# Soil retaining structures program

A Port of Rotterdam – TU Delft initiative

Mark van Koningsveld & Luca Flessati



# Program:

1. Short introduction – Mark van Koningsveld
2. First ideas of a research agenda – Luca Flessati
3. Reliability updating and the need for standardization – Camille Habets



## P&W Research roadmap:

- Nautical traffic, capacity and safety
- Sediment management and accessibility
- Port and waterway infrastructure
- Sustainability
- Digitalisation

# Nautical traffic

- The algorithms we develop in our group, are quite specific to **academic research questions**.
- The approaches we use, however, are very suitable to be incorporated into platforms that can be **used by practitioners**
- Here you can see a screenshot of our so-named **Digital Twin of Waterway Corridors**
- The Digital Twin creates an easy-to-use **connection between real-world data** (on the network, water levels, currents, etc) and **advanced analysis algorithms**.
- This provides a perfect valorisation context!



# Infrastructure

- Both Port of Rotterdam and TUDelft are aware that there is a **wealth of data** at Port of Rotterdam and its partners
- This data is currently **underutilized** and combined with academic knowledge **a lot of added value** can be created.
- This week **TU Delft and Port of Rotterdam** signed an agreement for a **2-year collaboration!**
- The aim is to make data easier accessible for academic researchers that work on port problems to **speed up the development of added value.**



Port of  
Rotterdam



# Activities:

1. Starting with the setup of basic agreements and infrastructure:
  - Framework agreement (general agreement to share data)
  - Per project create a project agreement and a data delivery agreement
  
  - Then Port of Rotterdam involved their IT department to facilitate access
  - Some data is better left at the PoR servers (e.g. hydrodynamics)
  - Other data might at first be better transferred to facilitate experimentation
2. Next we are talking about areas where added value may be created
  - Grout anchor data
  - Wall thickness measurements
3. When will we be satisfied?
  - Can we get agreements in place and overcome ‘mental issues’ of sharing?
  - Can we actually get the data to ‘flow’?
  - Can we define shared research questions ?
  - Can we mobilise capacity to address these questions and add value?

Q geo|

Type ▾

Language ▾

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New

5 results for all repositories matching **geo** sorted by **last updated**

Clear filter

**geo-borehole-decoder**

Private

Python ☆ 0 MIT 0 0 0 0 Updated 4 days ago

**geo-gefreader**

Private

Jupyter Notebook ☆ 0 MIT 0 0 0

**geo-4TU-data-intake-pipeline**

Private

Repository for the collaborative development of geodata util

Python ☆ 0 MIT 0 13 0 Updated

**BE-notebooks**

Public

A hub for Building Engineering students at the faculty of Civ

Jupyter Notebook ☆ 0 MIT 0 0 0

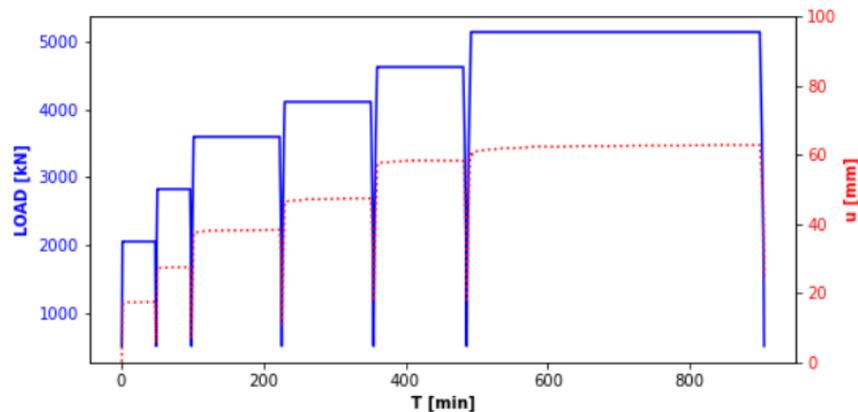
**geo-geolib-hackaton**

Private

Digishape sandbox

Python ☆ 0 0 9 0 Updated on Dec 18, 2020

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