
Mobile Robotic Platform for Human Gait Analysis (ROBOGait)

A Data Management Plan created using DMPonline

Creators: Diego Guffanti, First Name Surname

Affiliation: Delft University of Technology

Template: TU Delft Data Management Plan template (2021)

ORCID ID: 0000-0002-1244-291X

Project abstract:

ROBOGait is a mobile robotic platform designed for human gait analysis. Using SLAM, mapping and localization techniques it is able to plan trajectories for gait experiments. The operator sets points of interest on the map through which a trajectory will be generated to perform the gait experiment. The system is preconfigured for tracking the participant at 2.5m. During each gait experiment, an RGBD camera extracts the three-dimensional positions of 19 joints of interest. Once the test is completed, the captured data is automatically exported as a .csv file. The objective of the research is to perform a reliability study of this mobile robotic platform ROBOGAIT. The error of the system with respect to a certified XSENS system will be measured. Since this is an exploratory study, it is estimated that data will be collected from 10 participants walking in the corridors.

ID: 76890

Start date: 01-05-2021

End date: 01-08-2021

Last modified: 14-05-2021

Copyright information:

The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customise it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

Mobile Robotic Platform for Human Gait Analysis (ROBOGait)

0. Administrative questions

1. Name of data management support staff consulted during the preparation of this plan.

Yasemin Türkyilmaz-van der Velden

2. Date of consultation with support staff.

2021-05-04

I. Data description and collection or re-use of existing data

3. Provide a general description of the type of data you will be working with, including any re-used data:

Type of data	File format(s)	How will data be collected (for re-used data: source and terms of use)?	Purpose of processing	Storage location	Who will have access to the data
Gait data recorded with a RGBD camera	.csv file	Walking test	To perform a reliability study of the mobile robotic platform ROBOGait	One-drive	The project team

4. How much data storage will you require during the project lifetime?

- < 250 GB

II. Documentation and data quality

5. What documentation will accompany data?

- Data dictionary explaining the variables used
- README file or other documentation explaining how data is organised
- Methodology of data collection

III. Storage and backup during research process

6. Where will the data (and code, if applicable) be stored and backed-up during the project lifetime?

- OneDrive

IV. Legal and ethical requirements, codes of conduct

7. Does your research involve human subjects?

- Yes

8A. Will you work with personal data? (information about an identified or identifiable natural person)

If you are not sure which option to select, ask your [Faculty Data Steward](#) for advice. You can also check with the [privacy website](#) or contact the privacy team: privacy-tud@tudelft.nl

- No

8B. Will you work with any types of confidential or classified data or code as listed below? (tick all that apply)

If you are not sure which option to select, ask your [Faculty Data Steward](#) for advice.

- No, I will not work with any confidential or classified data/code

9. How will ownership of the data and intellectual property rights to the data be managed?

For projects involving commercially-sensitive research or research involving third parties, seek advice of your [Faculty Contract Manager](#) when answering this question. If this is not the case, you can use the example below.

The datasets underlying the published papers will be publicly released following the TU Delft Research Data Framework Policy. During the active phase of research, the project leader from TU Delft will oversee the access rights to data (and other outputs), as well as any requests for access from external parties. They will be released publicly no later than at the time of publication of corresponding research papers.

V. Data sharing and long-term preservation

26. What data will be publicly shared?

- All data (and code) underlying published articles / reports / theses
- All data (and code) produced in the project

28. How will you share your research data (and code)?

- I will upload the data to another data repository (please provide details below)
- All data will be uploaded to 4TU.ResearchData

Data will be uploaded to 4TU.ResearchData and One-drive

30. How much of your data will be shared in a research data repository?

- < 100 GB

31. When will the data (or code) be shared?

- As soon as corresponding results (papers, theses, reports) are published

32. Under what licence will be the data/code released?

- CC0

VI. Data management responsibilities and resources

33. Is TU Delft the lead institution for this project?

- No - please provide details of the lead institution below and your role in the project

The project belongs to the Polytechnic University of Madrid, this is a collaboration for research purposes.

34. If you leave TU Delft (or are unavailable), who is going to be responsible for the data resulting from this project?

Heike Vallery (H.Vallery@tudelft.nl) is the supervisor of the research stay. I will transfer the data to her.

35. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

4TU.ResearchData is able to archive 1TB of data per researcher per year free of charge for all TU Delft researchers. We do not expect to exceed this and therefore there are no additional costs of long term preservation.