**Data Management Plan Template**

# University of Bath requirements for a Data Management Plan

The [University of Bath Research Data Policy](http://www.bath.ac.uk/research/data/policy/)[[1]](#footnote-1) stipulates that all new projects must have a Data Management Plan (DMP).

# Guidance for use of this template.

You can access **example wording** for each section of the DMP on our [Data Management Plan Guidance Wiki](https://wiki.bath.ac.uk/x/Th8pBw) page (this will require a University of Bath single login).

# Training and support for Data Management Plan development

The [Library Research Data Service](https://library.bath.ac.uk/research-data/home) provides guidance through their webpages and individual consultations ([research-data@bath.ac.uk](mailto:research-data@bath.ac.uk)).

**You should delete all guidance (in italics) and this cover page once you have completed your Data Management Plan.**

# Overview

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| Project title |
| Harmonic synchronisation of hand gestures with visual displays |
| PI name and department |
| Note: the most senior University of Bath member of staff involved in the project is the [Data Steward](https://www.bath.ac.uk/corporate-information/research-data-policy/) for the project. |
| Christopher Clarke and Department of Computer Science |
| Project description |
| Study One  Participants of the study will be asked to mimic visual displays with their hands, this will include moving their arm in a circular motion, rotating their hand, and doing a grasping motion.  This will be done at multiple different speeds and sizes of motion.  The key features of the hand will be stored in a dataframe from a live camera feed however there will be no video recording saved.  If the participant needs to take a break or feel any form of discomfort, then they can inform the researcher at any point.  ​This data will be used to create the models that will assess whether future participants are able to synchronise with the targets.  Study Two  Future participants will synchronise with the moving targets and then use a user interface. This will be followed by the users giving feedback on which moving targets they preferred for different tasks and how difficult they found it to synchronise with the displays at different sizes and speeds. |

# Compliance

Information on additional University of Bath policies and UK/EU legislation that may apply to research can be found in our [Data Management Plan Compliance Wiki page.](https://wiki.bath.ac.uk/x/sh8pBw)

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| University policy requirements | |
| Study One  This data is classified as Restricted as the data will be pseudo anonymised.  Any requests to see the data will be forwarded to the Data Protection Team.  <https://www.bath.ac.uk/corporate-information/university-of-bath-privacy-notice-for-research-participants/> - this link will be provided to all participants to inform them of the University’s privacy notice for research. | |
| **University policy or guidance** | |
| [University of Bath Research Data Policy](https://www.bath.ac.uk/corporate-information/research-data-policy/) | |
| [University of Bath Code of Good Practice in Research Integrity](https://www.bath.ac.uk/corporate-information/code-of-good-practice-in-research-integrity/) | |
| [University of Bath Electronic Information Systems Security Policy](https://www.bath.ac.uk/corporate-information/university-of-bath-electronic-information-systems-security-policy/) | |
| [University of Bath Intellectual Property Policy](http://www.bath.ac.uk/ordinances/22.pdf) | |
| [University of Bath Code of Ethics](https://www.bath.ac.uk/corporate-information/code-of-ethics/) | |
| *Other (add other relevant policies here or delete)* | |
| *Other (add other relevant policies here or delete)* | |
| *Other (add other relevant policies here or delete)* | |
| Legal requirements | |
| **UK Legislation or framework** | |
| UK Data Protection Act 2018 | |
| Human Rights Act 1998 | |
| Contractual requirements | |
| N/A | |
| **Name of funder** | **Data policy URL** |
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# Gathering data

There is guidance and example wording for this section on the [Data Management Plan Guidance Wiki](https://wiki.bath.ac.uk/x/Th8pBw) page

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| Description of the data |
| Types of data Primary data stored as tabular data with minimal metadata. Format and scale of the data Excel (.xlsx) saved as .CSV.  <100GB of storage required, ranging between 20MB to 1GB as an initial estimate. |
| Data collection methods |
| Data will be acquired by saving key feature coordinates of participants hands within the camera frame. |
| Development of original software |
| Google’s MediaPipe Hands package will be used within python. Dependencies will be handled by making sure the most update versions of the packages will be used. Where possible it will be made clear what versions of the packages are being used. This software is just for this project. |

# Working with data

There is guidance and example wording for this section on the [Data Management Plan Guidance Wiki](https://wiki.bath.ac.uk/x/Th8pBw) page. There is also guidance on [data storage](https://library.bath.ac.uk/research-data/working-with-data/data-storage), [documentation](https://library.bath.ac.uk/research-data/working-with-data/data-documentation-metadata) and [sharing with collaborators](https://library.bath.ac.uk/research-data/working-with-data/collaborating) on our webpages.

If you are collecting or processing personal data from **human participants** please ensure that you have read, or are aware of, the guidance regarding the use of encrypted folders for identifiable data.

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| Short- and medium-term data storage arrangements |
| 1. *All research data will be stored on the University managed storage (X: or H:Drive):* ***Yes*** |
| Control of access to data and sharing with collaborators |
| *Provide information on who will have access to the data, and methods of sharing data with collaborators.* |
| Documentation that will accompany the data |
| *Describe the documentation that you will keep so that your data are understandable and reusable to yourself and others and how this documentation will be written, for example within the files or as a ‘readme’ file.* |

# Archiving data

There is guidance and example wording for this section on the [Data Management Plan Guidance Wiki](https://wiki.bath.ac.uk/x/Th8pBw) page. There is also guidance on [archiving data](https://library.bath.ac.uk/research-data/archiving-and-sharing/home) on our webpages.

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| Selection of data to be retained and deleted at the end of the project |
| *You will need to retain some of your data (for example those underpinning publications) after the end of your project, but not all of your data. Describe which data you will keep and which will be deleted. If you are collecting personal data describe how you will delete or destroy the data securely. Ensure that you are fulfilling your legal and contractual requirements on data preservation.* |
| Data preservation strategy and retention period |
| *You cannot keep your data on the University managed servers indefinitely therefore we recommend submitting your data to a research data archive and the end of the project. There is guidance on* [*choosing an archive*](https://library.bath.ac.uk/research-data/archiving-and-sharing/choosing-an-archive) *on our webpages and on our [Data Management Plan Guidance Wiki page.](https://wiki.bath.ac.uk/x/Th8pBw)* |
| Maintenance of original software |
| *Provide information on whether you will archive a binary executable, installer or package file alongside your data. Will contribute your code to a language-specific network? Will you share your code through a source code repository service such as GitHub, GitLab, BitBucket or Launchpad?* *Provide information about whether you will continue to develop your code after the end of the project and who will have rights to edit the code.* |

# Sharing data

There is guidance and example wording for this section on the [Data Management Plan Guidance Wiki page.](https://wiki.bath.ac.uk/x/Th8pBw) There is also guidance on [sharing data](https://library.bath.ac.uk/research-data/archiving-and-sharing/home) on our webpages.

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| Justification for any restrictions on data sharing |
| *It is expected that, after publishing your research results, you will share the data underpinning the results as openly as possible. However, there* [*are justifications for not being able to share data openly*](https://library.bath.ac.uk/research-data/archiving-and-sharing/sharing-data)*, or limiting access to datasets. Provide information on any justified reasons for not sharing your data or applying restrictions on sharing.* |
| Arrangements for data sharing |
| *In this section you should provide details of how your data will be shared to other researchers at the end of the project. Whilst some journals allow data to be shared ‘on request from the author’ this approach is not sustainable in the long-term so we recommend sharing data through a suitable research data archive or repository.* |

# Implementation

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| Review of the Data Management Plan |
| *Your Data Management Plan is a living document that should be kept up to date during your project. Provide information about who will keep the plan up to date, and how regularly it will be reviewed. Review dates should be provided where possible.* |

1. University of Bath Research Data Policy: http://www.bath.ac.uk/research/data/policy/ [↑](#footnote-ref-1)