

# User Manual: DefaceMRI

Welcome to DefaceMRI User Manual. This guide will walk you through the steps to prepare your data and use the pipeline to anonymise and deface DICOM images.

## Preparing Your Data

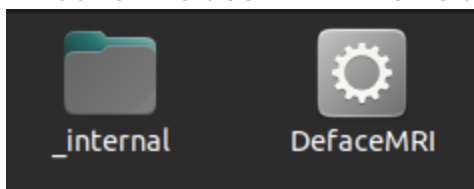
Before using the software, it's essential to ensure your data is properly organised. Follow these steps to prepare your DICOM files for defacing:

- 1. Organise DICOM Files:** Create a new folder and transfer all the DICOM files you intend to deface. You can include subfolders, but ensure all files within them are DICOM format.
- 2. Conversion to NIfTI:** Launch DefaceMRI and click "Select Directory" to choose the folder with all the DICOM files. Press "Convert DICOM to NIfTI (Review NIfTI files before proceeding)" to anonymise metadata and ensure compatibility with the defacing process.
- 3. Selecting Scans for Defacing:** Review the converted NIfTI files and decide which scans require defacing. Delete any unnecessary files. Keep in mind that FLAIR scans are not compatible. Failure to remove unnecessary files can cause significant delays or errors during script execution. Additionally, remove any reports saved as DICOM images, as they may contain sensitive information and cause errors in the defacing process.
- 4. Defacing NIfTI:** Assuming the selected directory remains the same, execute the code by clicking "Run" to deface the NIfTI files.
- 5. Converting back to DICOM:** This step is typically done automatically within the software unless you select otherwise from the options in the graphical user interface. Note that only files with the suffix "\_defaced.nii.gz" will be converted back to DICOM.

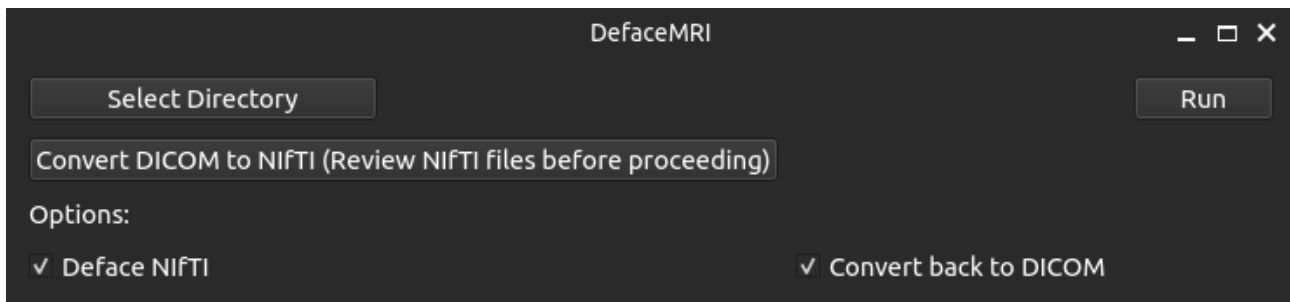
## Using the Software

To execute the pipeline, follow these steps:

- 1. Launch DefaceMRI:** In the DefaceMRI folder, double-click the file DefaceMRI.



- 2. Select Directory:** Within the pop-up window, click on "Select Directory" to choose the folder containing your DICOM or NIfTI files. After conversion, there are additional options to toggle – "Deface NIfTI" and "Convert back to DICOM". Choose according to your requirements.



3. **Convert to NIfTI:** Clicking "Convert DICOM to NIfTI (Review NIfTI files before proceeding)" will immediately execute the code to convert the files.

4. **Execute Operation:** After selecting the directory, initiate the operation by clicking "Run". The software will proceed with defacing, depending on the selected options.

Should you encounter any difficulties or have further questions, please don't hesitate to contact me for assistance. Happy defacing!

Email: [emmanouil.demosthenous@kcl.ac.uk](mailto:emmanouil.demosthenous@kcl.ac.uk)