

FAIR Data Management Workflow for MRI Data

Wednesday 11 October 2023 14:09 (3 minutes)

We present a workflow to improve the management of Magnetic Resonance Imaging data and to increase its compliance with the FAIR principles. This involves using the JSON Metadata Mapping Tool we have developed to map metadata from a domain-specific file format to a JSON schema based format, and storing the data and the mapped metadata in repositories. Some steps in the workflow are automated, while others require human intervention, facilitated by Graphical User Interfaces for each service. We assessed the compliance of our curated data to the FAIR principles, both manually and using the F-UJI tool. We obtain a FAIR assessment score of 79% for both datasets, which is the highest compared to similar ones in the same field. According to these results, we conclude that the workflow we have implemented can provide a significant improvement towards FAIR data management.

Please assign your contribution to one of the following topics

Data interoperability through harmonised metadata and interoperable semantics

Please specify "other" (stakeholder)

In addition please add keywords.

Metadata Mapping, FAIR Assessment, Materials Science

Please assign yourself (presenting author) to one of the stakeholders.

Researchers

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