Pipelines for Software Metadata Conversion and Publication

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Abstract

Reproducible research requires publication of software and datasets together with appropriate metadata. We present continuous integration pipelines to automatically generate such metadata for software (www.openCARP.org/CI). They are successfully used in the openCARP project and can be readily integrated into other projects. The user maintains only a CodeMeta file. which is a popular metadata standard tailored to research software. From there, further citation files are generated and can serve their purpose during specific phases of the software lifecycle: DataCite for software archiving, BagIt and BagPack for creation of tagged releases, deposition of releases in the RADAR data repository, and synchronisation of documentation files with the project's webpage.

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