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## Enhancing Metadata Handling in Research Software

Monday 4 November 2024 16:00 (1 hour)

The rapid evolution of research software necessitates efficient and accurate metadata management to ensure software discoverability, reproducibility, and overall project quality. However, manually curating metadata can be time-consuming and prone to errors. This poster presents two innovative tools designed to streamline and improve metadata management: *fair-python-cookiecutter* and *somesy*.

*fair-python-cookiecutter* is a GitHub repository template that provides a structured foundation for Python projects. It aids researchers and software developers in meeting the growing demands for comprehensive software metadata during Python tool and library development. By adopting this template, developers gain access to best practices, software development recommendations, and essential metadata standards that enhance software quality and ensure proper citation. The template aligns with standards such as the DLR Software Engineering Guidelines, OpenSSF Best Practices, REUSE, CITATION.cff, and CodeMeta. Additionally, it incorporates *somesy* to enhance the FAIRness (Findability, Accessibility, Interoperability, and Reusability) of software metadata. *fair-python-cookiecutter* is regularly maintained and updated in response to new library versions and user feedback, ensuring it remains a robust and up-to-date resource.

*somesy* (Software Metadata Synchronization) is a user-friendly command-line tool that simplifies the synchronization of software project metadata. Supporting key metadata standards like CITATION.cff and CodeMeta, *somesy* ensures the consistency and integrity of crucial project information, such as names, versions, authors, and licenses, across multiple files. This allows developers to focus on their core work without the burden of manual metadata upkeep. *somesy* is compatible with Linux, Windows, and macOS, providing cross-platform support for a wide range of development environments. It is regularly updated based on user feedback and the latest developments in software libraries.

Links:

1. <https://pypi.org/project/fair-python-cookiecutter/>
2. <https://pypi.org/project/somesy/>

### Please specify "other"

software developer

### In addition, please add 3 to 5 keywords.

python template metadata

### Please specify "other"

### For whom will your contribution be of most interest?

Researchers

**Please assign yourself (presenting author) to one of the following groups.**

other (please specify)

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