ReScience

Reproducible science is good. Replicated science is better.

If computer science offers a large set of tools for prototyping, writing, running, testing, validating, sharing and reproducing results, computational science still lags behind. In the best case, authors may provide the sources of their research as a compressed archive and feel confident their research is reproducible. But this is not exactly true. Buckheit and Donoho explained almost 20 years ago that, "*an article about computational result is advertising, not scholarship. The actual scholarship is the full software environment, code and data that produced the result*". The computational part in computational sciences implies the use of computers, operating systems, tools, frameworks, libraries and data. This leads to such a large number of combinations (taking into account the version for each components) that the chances to have the exact same configuration as one of your colleague are nearly zero. This draws consequences in our respective computational approaches in order to make sure research can be actually and faithfully reproduced.

ReScience is a peer-reviewed journal that target computational research and encourage the explicit replication of already published research promoting new and open-source implementations in order to ensure the original research is replicable. To achieve such a goal, the whole editing chain is radically different from any other traditional scientific journal. ReScience lives mainly on github where each new implementation is made available together with the comments, explanations and tests. Each submission takes the form of a pull request that is publicly reviewed and tested in order to guarantee any researcher can re-use it. If you or one of your students ever reproduced computational result from the literature, ReScience is the perfect place to publish this new implementation.

The ReScience Editors
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