

IPOL: Reviewed Publication and Public Testing of Research Software

Nicolas Limare, Laurent Oudre, Pascal Getreuer, CMLA, ENS Cachan

Abstract

With the journal Image Processing On Line (IPOL), we propose to promote software to the status of regular research material and subject it to the same treatment as research papers: it must be reviewed, it must be reusable and verifiable by the research community, it must follow style and quality guidelines. In IPOL, algorithms are published with their implementation, codes are peer-reviewed, and a web-based test interface is attached to each of these articles. This results in more software released by the researchers, a better software quality achieved with the review process, and a large collection of test data gathered for each article. IPOL has been active since 2010, and has already published thirty articles