

SciDetect discovers fake scientific papers

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After intensive collaboration with Dr. Cyril Labbé from Université Joseph Fourier in Grenoble, France, Springer announces the release of SciDetect, a new software program that automatically checks for fake scientific papers. The open source software discovers text that has been generated with the SCIgen computer program and other fake-paper generators like Mathgen and Physgen. Springer uses the software in its production workflow to provide additional, fail-safe checking. Springer and the University are releasing the software under the GNU General Public License, Version 3.0 (GPLv3) so others in the scientific and publishing communities can benefit.

SciDetect scans Extensible Markup Language (XML) and Adobe Portable Document Format (PDF) files and compares them against a corpus of fake scientific papers. SciDetect indicates whether an entire document or its parts are genuine or not. The software reports suspicious activity by relying on sensitivity thresholds that can be easily adjusted. SciDetect is highly flexible and can be quickly customized to cope with new methods of automatically generating fake or random text.

"SciDetect, developed by Tien Nguyen, a member of Dr. Labbé's team of PhD students, is a valuable building block for the future of academic publishing. It helps us ensure that unfair methods and quick cheats do not go unnoticed. We stand behind the integrity of our authors and consider it our duty to uphold this ethical principle. Accordingly, we have decided to make the software freely available to our partners," explained Dr. Hubertus von Riedesel, Executive Vice President Physical Sciences and Engineering at Springer.

"Although software cannot supplant peer reviews and academic evaluation, SciDetect lends publishers an additional hand in the fight against fraud and fake papers," said Dr. Cyril Labbé, who has been working with Springer since last year. "The software can scan large volumes of materials and give publishers further assurance about the reliability and quality of accepted papers. At Springer, the software already aids the evaluation process before production begins. Our cooperation with Springer has been very productive so far, and we look forward to making further improvements to the [software](#) together."

In February 2014, Springer learned that it had published 18 articles that were generated by the SCIGen computer program, which creates fake documents for submission as Computer Science and Engineering conference papers. Springer immediately reached out to Dr. Labbé, the leading expert in the field. As a result of their cooperation, Springer decided to fund a PhD candidate in Dr. Labbé's team, who is working with Springer to create better detection mechanisms and guard against any future programs that are similar to SCIGen.

Provided by Springer

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