

Editorial Preface

Publishing in Open Access

Francisco José García-Peñalvo, Computer Science Department, University of Salamanca, Salamanca, Spain

JITR following the guidelines of its publisher house, IGI Global, has recently adopted a hybrid open access model. This option allows the authors to select whether to publish their paper via the traditional, subscription-based model, or as an open access article which will be made freely available upon publication. If the author selects the open access option, an article processing charge must be paid by either the author or a funding body. The open access published papers will have a Creative Commons Attribution 4.0 International (CC BY 4.0) <https://creativecommons.org/licenses/by/4.0/legalcode> licensing arrangement, and the copyright remains solely with the author of the paper.

As Editor-in-Chief of JITR, I congratulate the decision made by the publisher because Open Knowledge (García-Peñalvo, García de Figuerola, & Merlo-Vega, 2010a, 2010b) in general and the Open Science (Bartling & Friesike, 2014; Ferreras-Fernández, Merlo-Vega, & García-Peñalvo, 2013b) specifically are very important for scientific knowledge development and sharing.

Moreover, the most important funding bodies in the world are betting for an Open Access via and it is a commitment for every paper related with a funding project to be freely accessible. Thus, this new IGI Global Open Access policy is so important to give our authors the right tools to fulfill the funding bodies' requirements.

The hybrid open access mode completes the open access traditional gold route and green route. The gold route means the authors to publish their papers in a fully open access journal, while the green route means authors to post a version of their manuscripts in an institutional repository or on their personal website (see for example GREDOS repository (Ferreras-Fernández, Merlo-Vega, & García-Peñalvo, 2013a; García-Peñalvo, Merlo-Vega, et al., 2010)).

Hybrid models are presented as one of the ways to break the subscription model of the institutions to scientific journals and thus promoting the necessary migration to Open Access on a large scale (Schimmer, 2016; Schimmer, Geschuhn, & Vogler, 2015). However, this hybrid approach is controversial because it can be a barrier for publications for authors and institutions that cannot afford to pay the imposed fees. This large-scale transition is the goal of the Open Access 2020 initiative (<https://oa2020.org/>).

Although Open Knowledge is an inherent dimension for the construction of a Knowledge Society in which Internet has broken the business models of practically any economic activity, Open Science is still under the suspicious eye of many researchers due to myths about: the quality of what is open available; the controversial about the rights of the online resources; the lack of impact of the open access journals; or the misunderstanding of the citation and visibility issues (García-Peñalvo, 2017).

Many of the reluctance to publish in open access is due to the predatory journals (Beall, 2010) that do not offer models with rigor and transparency enough.

The mission of a University must be with the development and dissemination of the knowledge to the society, therefore, Open Knowledge is inherent to that mission. In addition, universities have

a moral duty to support the commitment to less favoured sectors and societies; efforts must be done to bring knowledge to the forefront as a value for the Third Mission (García-Peñalvo, 2016).

This JITR issue is comprises six research papers.

Zekri Lougmiri (2017) presents a new progressive algorithm for computing the skyline points. This algorithm is based on sorting as a preprocessing of the input.

The data containing structural information is an important problem in the field of machine learning. Kernel methods is an effective technique for solving such problems. A combined dimension kernel method is proposed or graph classification in the contribution of Cao and Wang (2017). A two-dimensional kernel is first constructed in this method, and it incorporates one-dimensional information to characterize the molecular chemistry, and then a three-dimensional kernel is constructed based on the knowledge of molecular mechanics to characterize the physical properties of the molecule. On this basis, the kernel of different dimensions is integrated, and the quadratic programming problem with quadratic constraints is solved to obtain the optimal kernel combination.

The third paper deals with event-based extraction for criminal incidents from Arabic tweets (Abdelkoui & Kholadi, 2017). It presents a framework that supports automated extraction of spatial and temporal information from tweets. The proposed approach is based on combining various indicators, including the names of places and temporal expressions that appear in the tweet message, related tweeting time, and additional locations from the user's profile.

Hewahi and Hamra (2017) propose a new approach combining particle swarm optimization algorithm (PSO) and genetic algorithm (GA), to increase the classification accuracy of Artificial Neural Network (ANN). This approach utilizes the advantages of both PSO and GA to overcome the local minima problem of ANN, which prevents ANN from improving the classification accuracy. The algorithms start with using backpropagation algorithm, then it keeps repeating applying GA followed by PSO until the optimum classification is reached.

The fifth paper describes a case study carried out with undergraduate German language students using a Virtual Worlds-based video game. The results provide a set of indicators for analyzing individual and group behavior measuring student competence to communicate in the target language (Balderas, Berns, Palomo-Duarte, Doderio, & Ruiz-Rube, 2017).

The last paper of this issue is related to the network analysis literature, which counts plenty of models of different paradigms designed for solving the link prediction problem in complex information networks. However, fewer studies that have exploited link strength-related social theories for this purpose even in a social context. Mohdeb et al. (2017) introduce a new approach to solve the link prediction problem in scientific bibliographic networks. Their aim is to predict future collaboration relations between scientists relying upon the "strength of strong ties" hypothesis. The proposed model estimates the strength of a relation between two scientists using a set of efficient link strength indicators.

Francisco José García-Peñalvo
Editor-in-Chief
JITR

REFERENCES

- Abdelkoui, F., & Kholadi, M.-K. (2017). Extracting criminal-related events from Arabic tweets. *Journal of Information Technology Research*, 10(3).
- Balderas, A., Berns, A., Palomo-Duarte, M., Dodero, J. M., & Ruiz-Rube, I. (2017). Retrieving Objective Indicators from Student Logs in Virtual Worlds. *Journal of Information Technology Research*, 10(3).
- Bartling, S., & Friesike, S. (Eds.). (2014). *Opening Science. The Evolving Guide on How the Internet is Changing Research, Collaboration and Scholarly Publishing*. Heidelberg: Springer International Publishing.
- Beall, J. (2010). "Predatory" Open-Access Scholarly Publishers. *The Charleston Advisor*, 11(4), 10–17. doi:10.5260/chara.12.1.50
- Cao, T., & Wang, J. (2017). A Combined Dimensional Kernel Method for Graph Classification. *Journal of Information Technology Research*, 10(3).
- Ferreras-Fernández, T., Merlo-Vega, J. A., & García-Peñalvo, F. J. (2013a, November 14-15). Impact of Scientific Content in Open Access Institutional Repositories. A case study of the Repository Gredos. In F. J. García-Peñalvo (Ed.), *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13)*, Salamanca, Spain (pp. 357-363). New York, NY, USA: ACM. doi:10.1145/2536536.2536590
- Ferreras-Fernández, T., Merlo-Vega, J. A., & García-Peñalvo, F. J. (2013b, November 14-15). Science 2.0 supported by Open Access Repositories and Open Linked Data. In F. J. García-Peñalvo (Ed.), *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13)*, Salamanca, Spain (pp. 331-332). New York, NY, USA: ACM. doi:10.1145/2536536.2536586
- García-Peñalvo, F. J. (2016). The Third Mission. *Education in the Knowledge Society*, 17(1), 7–18. doi:10.14201/eks2016171718
- García-Peñalvo, F. J., García de Figuerola, C., & Merlo-Vega, J. A. (2010a). Open knowledge management in higher education. *Online Information Review*, 34(4), 517–519.
- García-Peñalvo, F. J., García de Figuerola, C., & Merlo-Vega, J. A. (2010b). Open knowledge: Challenges and facts. *Online Information Review*, 34(4), 520–539. doi:10.1108/14684521011072963
- García-Peñalvo, F. J., Merlo-Vega, J. A., Ferreras-Fernández, T., Casaus-Peña, A., Albás-Aso, L., & Atienza-Díaz, M. L. (2010). Qualified Dublin Core Metadata Best Practices for GREDOS. *Journal of Library Metadata*, 10(1), 13–36. doi:10.1080/19386380903546976
- García-Peñalvo, F. J. (2017). Open Access Myths and Realities. *Education in the Knowledge Society*, 18(1), 7-20. doi:10.14201/eks2017181720
- Hewahi, N. M., & Hamra, E. A. (2017). A Hybrid Approach Based on Genetic Algorithm and Particle Swarm Optimization to Improve Neural Network Classification. *Journal of Information Technology Research*, 10(3).
- Lougmiri, Z. (2017). A new progressive method for computing skyline queries. *Journal of Information Technology Research*, 10(3).
- Mohdeb, D., Boubetra, A., & Charikhi, M. (2017). Strength-based Link Prediction in Scientific Bibliographic Networks. *Journal of Information Technology Research*, 10(3).
- Schimmer, R. (2016). *Making moves towards the large-scale transition to Open Access*. Retrieved from Europe: http://sparseurope.org/wp-content/uploads/2016/11/Schimmer_231016_Final.pdf
- Schimmer, R., Geschuhn, K. K., & Vogler, A. (2015). *Disrupting the subscription journals' business model for the necessary large-scale transformation to open access*. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-0026-C274-7>