

# Editorial

Maurer, Hermann

In this Special issue we have collected information from all over the world on how to preserve and use information in a digitized form.

I want to start on rather personal note: Ian Witten was a graduate student in one of my classes in the late sixties in Calgary, Canada. He built up an impressive career in both Canada and his home-country New Zealand, certainly becoming the best-known computer scientist in New Zealand, before his retirement, a short while ago. We only collaborated once for a longer period, when Witten spent a sabbatical in Graz. But somehow, we had, some 30 years ago, independent of each other, the same vision: digitized material should be easily and openly accessible. In that sense, we propagated free access to scientific results some 20 years before it became a main credo of research supported by the European Union. Witten concentrated on bringing this to libraries with his successful Greenstone project [1] in the early nineties. David Bainbridge describes this project and its success in paper 1, "*A Renewed Look at Greenstone: Lessons from the Second Decade*".

Just about the same time I started with the world first open source and free access journal JUCS [2], now also 25 years old and widely accepted.

It is curious that now, towards the end of my career I am returning to a new kind of library that colleagues and I are describing in the last two papers. Paper 9, "*Experiences Based on a Major Information Server*", discusses some basics, but paper 10, "*Investigating Interaction Activities in Digital Libraries: The Networked Interactive Digital Books Project*", gives a glimpse into the future of a system NID (Networked Interactive Digital Books) that will officially be released in spring 2020 and will allow combining books and papers into coherent collections concerning topics chosen by the users.

It is interesting that in addition to commercial applications which we do not discuss in this issue, digitized material was soon used for educational purposes as paper no. 2, "*Digital Materials to Support Learning: Success Stories in Teaching Computer Science*" by Andreas Bolin, and paper no. 3, "*The New Functions of OER Repositories for Personalized Learning*" by Tsuneo Yamada, show. How far one can use digitized repositories (and interactions) to help learning is shown also in paper no. 5, "*Computational Notebooks in Public Repositories*" by Daniel Speicher et al, presenting a combination of books, discussion forums, collections of notes, and papers. Paper no. 4, "*Preserving Cultural Knowledge Through Community-Lead MOOCs*" by Narayanan Kulathuramaiyer et al, gives a perfect example how culture can be preserved for large groups of persons through the Internet.

Paper no. 6, "*Towards 3D Digitization in the GLAM (Galleries, Libraries, Archives, and Museums) Sector: Lessons Learned and Future Outlook*" by Reimar Tausch et al, goes to the heart of digitization: explaining why and how artifacts of all kinds can be efficiently virtualized. Paper no. 7, "*Potential of Bots for Encyclopaedia*" by Mirhet Saracevic et al, shows the dissatisfaction with searching for information by just using words or simple metadata and proposes the use of bots to help users, or to at least nudge them towards the area they are really interested in. In paper no. 8, "*Insights to the State-of-the-Art PDF Extraction Techniques*" by Ahmer Maqsood Hashmi et al, the idea is examined from a different point of view: how to extract relevant information from pdf files, a task that will grow in importance more and more.

In paper no. 9, "*Experiences Based on a Major Information Server*" by Namik Delilovic et al, briefly mentioned before, we are considering how to find information readily (as explained in some of the preceding papers) but also that a new phenomenon arises: we may not be able to present information any more in one way for all groups of users. The good old textbook is more and more rejected by younger persons, but graphics, considered trivial or stupid by older generations, may be the only way to convey information to younger ones. This seems to be the obvious consequence of the fact how fast society and technology are changing. In paper no 10, "*The New Functions of OER Repositories for Personalized Learning*" by Bilal Zaka, we claim that the era of traditional libraries (including digitized ones) is coming to an end: we should not see a library any more as a set of isolated untouchable entities,

but as a repository of information where, for any topic of interest, pieces of information can be pulled together from various books, webpages, and other documents. Also, why not allow users to make remarks in books readable only by some persons of designated groups, or why not start discussions, again controlled, so that negative effects like mobbing or promoting nonsense as happens in some social media, is not possible.

*H. Maurer, [hmaurer@iicm.edu](mailto:hmaurer@iicm.edu), Graz University of Technology, Jan 2020*

#### REFERENCES

[1] [http://files.greenstone.org/others/Greenstone\\_history.htm](http://files.greenstone.org/others/Greenstone_history.htm)

[2] <http://www.jucs.org>