## **Coming of Age: An Anniversary to Celebrate**

In 2012 *CIT. Journal of Computing and Information Technology* celebrates its twentieth year of regular publishing. As this anniversary is difficult to reach in an otherwise very competitive environment like scientific publishing, I feel compelled to commemorate it in this Editorial, where I am outlining both the most important steps in CIT's life, as well as future plans along with respective present activities meant to help fulfill them.

## Blast to the Past: Why CIT? How to Start a New Journal in Computing?

*CIT. Journal of Computing and Information Technology* was conceived 20 years ago, in 1992, while its first number was published in 1993. The Journal was intended to be a platform for publishing the results of home researchers in the field of computing, as well as of information technology as, at the time, the want for such a journal had become more pronounced. The demands placed upon *CIT* required it to be a quality journal, which would soon acquire an international reputation, attracting quality authors and, with time, becoming recognizable. These demands in turn implicated both quality contents and graphical design. Right from the beginning, *CIT* devoted itself to nourish the exchange of ideas, practice and knowledge among regions with different technological and cultural legacy, targeting especially Central European and Mediterranean countries. In this respect, the journal had to publish results of original research, surveys and tutorials. As it was felt that such a feature would contribute to its overall quality, during its very beginnings*CIT* had run a book reviews column, which extended all through its first decade of publishing. Incidentally, the first four years of *CIT*'s publishing, the editing of this column saw me as the responsible Books Review Editor.

The first Editor-in-Chief was Leo Budin, Fellow of the Croatian Academy. As early as in the first three years of publishing, the Editorial Board under his leadership succeeded in establishing the Journal in the international arena and in achieving publishing stability. In this regard, the network of Croatian researchers working abroad was quite instrumental, as well as the introduction of other, rather technical steps like the creation of *CIT*'s Webpage. As our publisher is Srce – University Computing Centre, in the first years of its publishing, *CIT* established a close cooperation with the "sister" conference *Information Technology Interfaces – ITI*, which republished the best *ITI* papers in *CIT* special issues, which has, over the years, become quite a tradition.

In the next three-years term, Professor Budin's successor to the position of *CIT*'s Editor-in-Chief was Professor Vlatko Čerić, who engaged himself in further organizational improvement of *CIT*'s editorial policy. Thanks to his personal contacts, Professor Čerić succeeded in recruiting a number of internationally established researchers who would cooperate in CIT's publishing endeavor, by serving as members of either the Editorial Board or of the Editorial Advisory Board.

The next Editor-in-Chief was my predecessor, Professor Sven Lončarić, who served for 13 long years. During this he devoted himself to further improving the quality of published papers. He particularly worked on attracting more quality submissions through publishing a number of *CIT* 

Special Issues devoted to innovative topics. Not limiting himself to this, in 2002 he additionally introduced a Web based journal management system, which he locally developed with his team. The system named *Papyrus* supported the "digitalization" of all *CIT*'s editing and publishing activities, eventually providing its digital edition named *e-CIT*. It should be noted that the introduction of *Papyrus* represented a quantum leap and served as a model for other scientific journals in Croatia. In 2009, *CIT* switched from *Papyrus* to the *Open Journal System* (*OJS*), which is presently in use.

Under Professor Lončarić's editorship, another two significant novelties were introduced. By accepting the Open Access Initiative, in 2005 *CIT* joined the community of digital journals supporting free (no-payment) content retrieval. From that moment on, *CIT* papers could be accessed through the Portal of scientific journals of CroatiaHrčak (hamster), too. Thanks to Srce's joining the *CrossRef* community in 2006, *CIT* also introduced standard tagging of published papers with the *Digital Object Identifier* (*DOI*).

Results of the Editorial Board undertakings over the last twenty years of *CIT*'s publishing can be thus summarized by the following numbers. In the period 1993-2012 *CIT* was published in twenty volumes of four issues each. Approximately 1300 papers were submitted for publication, with less than 600 papers effectively published. Of this number, 85% were authored by foreign authors. The overall rejection rate in the same period amounted to 54%; considering the yearly rate of submitted and rejected papers only, the average yearly rejection rate amounted to 38%. In the last 5 years this rate rose to 45%.

In 2012 only, the number of processed papers amounted to 106, out of 126 submitted before and during 2012. With respect to the total number of papers, the rejection rate amounted to 61%, with 18% of submitted papers being rejected because of plagiarism or self-plagiarism. As it can be noted, regarding the number of rejected papers, as many as 30% were plagiarized or self-plagiarized.

The Editorial Board strictly enforces a review process which foresees the engagement of globally distinguished scientists who are experts in respective fields. At least two reviewers are assigned to a submission that is forwarded in the review process. Thus, as early as in 2006, the Croatian Ministry for Science, Education and Sport recognized *CIT*'s quality and included it in the 10% best-ranked Croatian scientific journals. Both the Ministry and Srce have partially funded *CIT*'s publishing since the beginning.

## CIT Today: What Problems Are We Facing?

Through the dedicated work of my predecessors, as well as of all the members of the Editorial Board, and with substantial support of our publisher – Srce, the journal succeeded in maintaining its position in spite of the tough competition of international scientific publication in the area of computing. *CIT* can also pride itself on two editions – the paper and the digital one. The paper edition represents an especially qualitative shift from the solely digital journals, which are flooding the market nowadays. However, this "added value" can come to the fore only when other conditions are met, which obviously refers to a stable periodicity.

The problem of ensuring a stable submission inflow is actually pretty global, as it ails all scientific journals and influences the regularity of journal publishing. Speaking in computer related terms, this would certainly be denoted as the need to "keep the [submission] pipeline full". Of course, the published papers should be of adequate quality, along with being interesting to a wider readership. This in turn implies a number of things: that at least some of *CIT*'s authors be distinguished in the field; that the research accounted to in the papers be thoroughly described using an engaging style; and, above all, that publishing in *CIT* brings prospective authors some satisfaction. In the view of currently omnipresent bibliometric assessment of research work, the latter unquestionably refers to the requirement that *CIT* be quoted in respected referent indexes. Presently *CIT* is indexed in some 10 index bases, with *Scopus* being the most prominent one.

Obviously, the inherent *CIT*'s problem is its wide scope, i.e. the missing specialization, which implies the need for an editorial board of wide competence, capable of processing submissions from diverse areas of computing and information technology. On the other hand, *CIT* as an international

journal should aspire both to an adequate international structure of its Editorial Board and to a time efficient and prompt processing of received submissions, since it is evident that prospective authors wouldn't be attracted by an untimely response. Hence, we are often confronted by two contradictory requirements: on the one hand, there is a complex and often time consuming task to find suitable reviewers, while on the other, the authors wish to get some response as soon as possible. As *CIT*'s submissions are occasionally of a content that is boundary with respect to its declared scope, this is an issue which we are currently solving by engaging distinguished researchers as on-the-fly editors.

Another serious issue the Editorial Board is presently facing is the one concerning scientific integrity. Namely, as noted above, the plagiarism and self-plagiarism share among newly submitted papers has increased considerably, so that in 2012 only 16 cases of (self-)plagiarism have been detected among the papers submitted prior to 2012, and 7 such cases among 2012 submissions. Identification of this issue, as well as considerable editorial effort used in finding (self-)plagiarized submissions, prompted us to introduce a plagiarism detection tool to obviate for such an offense. In this respect, *CIT*'s publisher Srce has purchased the *CrossCheck* and *iParadigm* systems, thus enabling checking of submissions to *CIT* before they are forwarded into the reviewing process, starting in 2013.

## The Future: Is It "La Vie en Rose"?

*CIT*'s future editorial policy will build upon the present, aiming to improve those elements of our activity that have proved deficient so far. In this respect the main target is to keep the Journal's periodicity along with an acceptable rejection rate, as well as to make it more attractive to wider audience. Because of this, we are planning to prepare both Special Issues and Special Sections, which will be devoted to new and innovative topics, and be guest edited by internationally recognized researchers.

Additionally, aside our traditional cooperation with the *ITI* conference, we plan to establish an institutional cooperation with other international symposia by inviting best paper authors to submit their contributions adequately revised according to *CIT*'s publishing standards. By applying such steps we hope both to achieve wider journal dissemination and to improve its quality.

*CIT* is just undergoing reconstruction of its Editorial Board. The newly engaged editors, who would be mostly foreign colleagues, are expected to help us in accelerating the submission processing, with the aim to limit the processing time to 3 months from the date of submission to *CIT*. Such a reconstructed Editorial Board is meant to work in a pronouncedly proactive way, and not just "reactively" (i.e. "reacting" by processing the assigned submission, only). The editors are expected to be more actively engaged in encouraging new prospective authors to submit their papers to *CIT*, as well as to recognize new and interesting topics as candidates for *CIT*'s Special Issues. In order to avoid editors' "saturation" with a sometimes overwhelming load, we plan to periodically perform such a reconstruction, thus offering the opportunity to new editors with new and fresh ideas which would make *CIT* even better and more innovative. We are confident that by enforcing such measures we will achieve an additionally improved journal profile, making *CIT* more recognizable, and eventually improving its indexing, too.

As CIT is presently indexed in some ten referent bases, the most distinguished of them being *Scopus*, the Editorial Board will make any effort required to obtain *CIT*'s indexing in Thomson-Reuters' Web of Science, thus making it more attractive to a larger number of prospective authors. Namely, there is a pronounced indifference among both domestic authors and authors from the developed countries in closer and wider neighborhood, most probably because the lack of indexing in the referent bases prescribed as a *sine qua non* condition for their advancement in the scientific environment.

Specifically addressing the issue of papers needed for one's professional advancement, and the unquestioned pressure put on the candidates to publish as much as possible (along with the slogan "Publish or perish!"), we have been noting the decrease in quality of the respective papers, and

eventually cases of (self-)plagiarism, too. Detection of plagiarism and self-plagiarism among submitted papers stays as the paramount task for the Editorial Board. Along with the application of tools which allow for the automation of this activity, *CIT* will also dedicate itself to spreading among the younger authors the understanding of scientific integrity and such a position will be promulgated in *CIT*'s future operation.

During the whole publishing period *CIT*'s circulation has been greater than 1000 copies per number. Along with publishing costs, this figure envisages also quite consistent postal costs. In this respect, the Editorial Board considers the pros and cons of publishing only the digital version of *CIT*, while publication of the paper version would be limited to reference requirements (e.g. libraries, index bases, and specific authors/subscribers' requirements). Thus, the digital edition would become the primary one. Digitalization of the remaining *CIT* volumes, up to 1999, which will be additionally organized, will result in the availability of the whole *CIT* archive under the auspices of the open access approach.

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