

To foster high quality of scientific publications the faculty has set up the so called A/B Publication Strategy.

The Faculty of Computer Science was asked by the Rectorate to present lists of publication venues (journals and conferences) for categories A and B, where category “A” contains outstanding top publication venues and category “B” excellent publication venues.

We defined necessary criteria for publication media to belong in either category and discussed the scheme with the scientific advisory board of the faculty (June 16-17, 2006). Then we asked the organizational subunits of the faculty to provide candidate lists and finally we integrated and balanced those lists. The result was a faculty-specific taxative listing of publication media (journals and recurring conferences with strict peer review and high reputation) ranked in the categories A (“outstanding”) and B (“excellent”). This list was prepared in a 4 phase process.

1. First, general criteria for assigning publication media in these categories were established.
2. Discussion of these criteria with the Scientific Advisory Board of the faculty.
3. Identification of the relevant top publication venues and generation of concrete lists for candidate publication media.
4. Discussion of these concrete lists with the scientific advisory board of the faculty.

The highly dynamic nature of computer science and its publication venues causes the need to re-evaluate and adapt the criteria and the lists regularly. The overall strategy has been consolidated in 2008. It was agreed between Rectorate, Scientific Advisory Board and Faculty of Computer Science to also recognize publications fulfilling the criteria for category A or B, but not contained in the taxative lists initially defined. Those publications are categorized as Ae or Be publications. The criteria themselves were updated in 2010 the first time. The most recent adaptation process has been performed June – October 2012. Updates always require consultation with and approval of the Scientific Advisory Board. The current version is V6, approved by the Scientific Advisory Board on May 24, 2019, effective since Jan 1, 2020.

General remarks

The rating of research performance by ranking (categorization) of scientific publications is a multi-layered and highly controversial subject, and at present there is no general solution for this problem in computer science. Although there have been various attempts (see, e.g., [1]), none could reach universal applicability and general acceptance.

It has to be emphasized that there are very strong differences across various scientific disciplines regarding categorization and ranking of publications and publication venues. A classic example for this fact is the rating of articles in proceedings volumes of conferences, which are much more important in computer science than in many other scientific disciplines due to the extremely high scientific turn-around-rate and the resulting very short publication-cycles. For top conferences in computer science, articles in their proceedings are to be ranked comparably to articles in high quality scientific journals. Top conferences with strict peer review system frequently shape the field at least as much as the best journals. This fact is also shown by the many references to articles in conference proceedings also in the highest ranking journals.

The Faculty of Computer Science is aware of the fact that ranking publication venues is an extremely complex and difficult task. This also applies to the ranking of interdisciplinary publications. Any approach for ranking of publication media has to be extremely well-considered and has to be constantly improved and developed further. Therefore, the Faculty of Computer Science permanently evaluates and adapts its process for rating and categorizing publication media.

Current criteria for A and B publication media

To be able to allocate a publication medium to the categories A or B, it has to meet the following criteria (based on submission of a “full paper”):

1. Registered in at least one of the following databases:
 - ACM Guide to Computing Literature (<http://portal.acm.org/guide.cfm>)
 - IEEE Xplore (<http://ieeexplore.ieee.org/>)
 - ISI Web of Knowledge (Thomson Reuters, <http://wokinfo.com/>)
 - Scopus (<http://www.scopus.com>)
 - DBLP (<http://www.informatik.uni-trier.de/~ley/db/>)
 - Google Scholar (<http://scholar.google.at/>)
 - CiteseerX (<http://citeseerx.ist.psu.edu/index>)
 - Inspec (<http://inspecdirect.theiet.org/>)
2. Peer reviewing process with at least 3 reviews
3. International program committee resp. editorial board
4. International dissemination
5. *Category A*: For a journal, the most recent impact factor in the Journal Citation Reports (JCR, Science Edition and Social Sciences Edition) of the ISI Web of Knowledge has to be greater than 1 or it has to be ranked A* or A in the most current Australian ERA journal ranking [2]. For a conference, its current acceptance rate has to be less than or equal to 20% or it has to be ranked A in the most current Australian ERA conference ranking [3].

6. *Category B*: For a journal, the most recent impact factor in the Journal Citation Reports (JCR, Science Edition and Social Sciences Edition) of the ISI Web of Knowledge has to be greater than 0.5 or it has to be ranked at least B in the most current Australian ERA journal ranking [2]. For a conference, its current acceptance rate has to be less than or equal to 34% or it has to be ranked at least B in the most current Australian ERA conference ranking [3].

Revision of scheme

Once a year a compulsory meeting of the working-group “publication ranking” will take place to review and evaluate the current categorization scheme as well as the faculty-specific taxative listing of category A and B publication media and propose changes as necessary. The SAB of the Faculty of Computer Science will be consulted before changes are applied.

References

[1] G. Kotsis, M. Hitz, Klassifikation von Publikationsorganen – ein Beitrag zur Bewertung der Forschungsleistung, Positionspapier ProIT, November 2004

[2] ERA Ranked Journal List 2010 / <http://portal.core.edu.au/jnl-ranks/> [Source: ERA2010]

[3] ERA Ranked Conference List 2018 / <http://portal.core.edu.au/conf-ranks/> [Source: CORE2018]