

CS specific Unit Criteria: Justification

In the field of computer science, publication in peer-reviewed conference proceedings is at least as prestigious as journal publication – sometimes more. The Association for Computer Machinery (the premier professional organization for computer scientists), the Computing Research Association, and the researchers in computer science universally agree that this is the case, as the following quotes show.

“A distinctive feature of CS publication is the importance of selective conferences and books. Journals do not necessarily carry more prestige.” (Meyer, Choppy, Staunstrup and van Leeuwen in the Association for Computing Machinery’s “Research Evaluation for Computer Science”)

“In computer science, papers in peer-reviewed conferences are accepted as high-quality scholarly articles. [...] When evaluating a computer scientist for hiring, tenure, etc., a proper evaluation should be based primarily on peer-reviewed conference publications.” (Ernst, memo on conferences and journals in computer science)

“The evaluation of computer science and engineering faculty for promotion and tenure has generally followed the dictate “publish or perish,” where “publish” has had its standard academic meaning of “publish in archival journals” [Academic Careers, 94]. Relying on journal publications as the sole demonstration of scholarly achievement, especially counting such publications to determine whether they exceed a prescribed threshold, ignores significant evidence of accomplishment in computer science and engineering. For example, conference publication is preferred in the field, and computational artifacts —software, chips, etc. —are a tangible means of conveying ideas and insight. Obligating faculty to be evaluated by this traditional standard handicaps their careers, and indirectly harms the field..” (Patterson, Snyder, and Ullman in the Computing Research Association’s Best Practice Memo for Evaluating Computer Scientists and Engineers For Promotion and Tenure.)

We therefore propose specific unit criteria for the CS department that acknowledge this fact. We have taken the CEM Unit Criteria and made the following changes:

In Chapter III section C parts II and III, we have changed “REFEREED HIGH-QUALITY PROFESSIONAL JOURNALS (PREFERABLY INDEXED IN THE WEB OF SCIENCE (SCI), THE ENGINEERING INDEX (EI), AND OTHER APPROPRIATE SCIENCE OR ENGINEERING INDEXES, WHERE APPLICABLE)” to “PEER REVIEWED PUBLICATIONS.”

Also, we have added clarifying text after part III which states “THE DISCIPLINE OF COMPUTER SCIENCE DOES NOT PREFER JOURNAL OVER CONFERENCE PUBLICATION, AND A SELECTIVE

CONFERENCE (E.G., SIGGRAPH) IS MORE PRESTIGIOUS THAN AN AVERAGE JOURNAL. THUS FACULTY EVALUATION MUST INCLUDE ALL PEER-REVIEWED PUBLICATIONS."

References:

"Research Evaluation for Computer Science", By Bertrand Meyer, Christine Choppy, Jørgen Staunstrup, Jan van Leeuwen. Communications of the ACM, Vol. 52 No. 4, Pages 31-34
<http://cacm.acm.org/magazines/2009/4/22954-research-evaluation-for-computer-science/fulltext>

"Conferences and Journals in Computer Science", Michael Ernst, University of Washington
<http://homes.cs.washington.edu/~mernst/advice/conf-vs-journal-INS-letter.pdf>

"Evaluating Computer Scientists and Engineers For Promotion and Tenure", David Patterson, Lawrence Snyder, Jeffrey Ullman. Computer Research Association Best Practice Memos.
http://cra.org/resources/bp-view/evaluating_computer_scientists_and_engineers_for_promotion_and_tenure/