Research Impact

CS 190
Fall 2019
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http://www.cs.pomona.edu/classes/cs190
Journal Impact Factor

• In any given year, it is the number of citations, received in that year, of articles published in that journal during the two preceding years, divided by the total number of articles published in that journal during the two preceding years.

• Devised by Eugene Garfield

• Highest impact factor (New England Journal of Medicine >79)
Limitations of impact factor

- Self-citations
- Many times editors insist that authors cite works in that journal
- Some disciplines tend to cite more than others
- Journals change their names thus affecting impact factor for approximately two years
- Does not take into account negative citations

- Not particularly useful for Computer Science since we publish mostly at conferences
Author impact metrics

• Raw number of citations

• H-index: A researcher with an index of $h$ has published $h$ papers each of which has been cited by others at least $h$ times

• Highest h-index in Computer Science held by Anil Kumar Jain (183 as of now!)

• i-10 index: Introduced by Google. # publications with at least 10 citations
Computer Science (& related) associations

- ACM - Association for Computing Machinery
- IEEE - Institute of Electrical and Electronics Engineers
- AAAI - Association for the Advancement of Artificial Intelligence
- IACR - International Association for Cryptologic Research
Computer Science conferences by area

- AAAI - Artificial Intelligence
- ACL - Natural Language Processing
- CHI - Human-Computer Interaction
- CIKM - Knowledge Management
- CVPR - Computer Vision
- CRYPTO - Cryptography
- FOCS - Theory
- FSE - Software Engineering
- ICCV - Computer Vision
- ICML - Machine Learning
- ICSE - Software Engineering
- IJCAI - Artificial Intelligence
- INFOCOM - Networking
- KDD - Data Mining
- NIPS - Machine Learning
- OSDI - Operating Systems
- PLDI - Programming Languages
- PODS - Databases
Computer Science conferences by area

• RECOMB – Computational Biology
• S&P - Security
• SIGCOMM – Networking
• SIGCSE – Computer Science Education
• SIGGRAPH - Graphics
• SIGIR – Information Retrieval
• SIGMETRICS – Performance
• SIGMOD – Databases
• SODA – Theory

• SOSP – Operating Systems
• STOC – Theory
• UIST – User Interfaces
• VLDB – Databases
• WWW – World Wide Web

*The list is non-exhaustive*
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Year/Publisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye tracking methodology</td>
<td>AT Duchowski</td>
<td>2007 - Springer</td>
</tr>
<tr>
<td>Eye-tracking analysis of user behavior in WWW search</td>
<td>LA Granka, T Joachims, Q Gay</td>
<td>2004 - dl.acm.org</td>
</tr>
<tr>
<td>Identifying fixations and saccades in eye-tracking protocols</td>
<td>DD Salvucci, JH Goldberg</td>
<td>2000 - dl.acm.org</td>
</tr>
<tr>
<td>Eye tracking: A comprehensive guide to methods and measures</td>
<td>K Holmovat, M Nystrom, R Anderson, B Dewhurst</td>
<td>2011 - books.google.com</td>
</tr>
</tbody>
</table>

Related searches
Google Scholar

Advanced search

Find articles with all of the words eye tracking
with the exact phrase
with at least one of the words
without the words
where my words occur anywhere in the article
in the title of the article
Return articles authored by e.g., "PJ Hayes" or McCarthy
Return articles published in e.g., J Biol Chem or Nature
Return articles dated between — e.g., 1996
Exercises

• https://www.craftofscientificwriting.com/exercises.html