# Research Impact

CS 190

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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

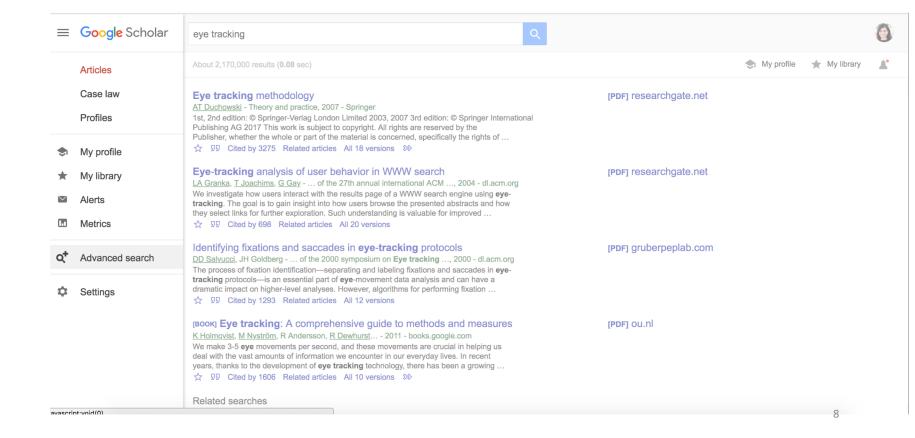
## Computer Science conferences by area

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

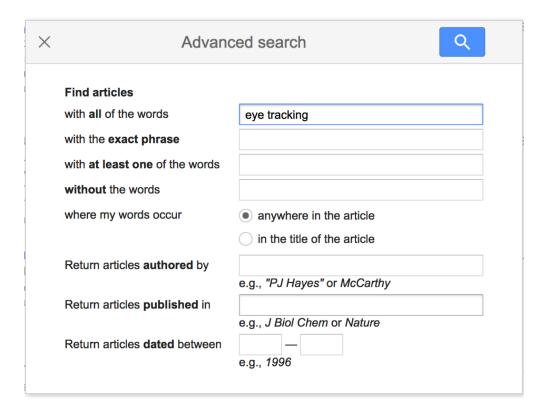
- SOSP Operating Systems
- STOC Theory
- UIST User Interfaces
- WWW World Wide Web

The list is non-exhaustive

## Google Scholar



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#### Exercises

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