Assignment 1 (ID6020)

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Different metrics that are used for ranking the journals are -

1. Journal Impact Factor (JIF) - It measures the average number of articles that have been published in a journal during the two preceding years that have been cited in the current JCR year. It essentially indicates the prominence of a journal in that field.
2. 5-Year Impact Factor - Works similarly to how JIF works, only the time period is 5 instead of 2. Provides a broader view of the journals' impact over a longer period of time.
3. Journal Citation Indicator (JCI) - It is a field-normalised citation metric that calculates the average Category Normalised Citation Impact (CNCI) for articles and review papers published in the past 3 years. It tries to provide a fair comparison of the journals across varied disciplines.
4. Immediacy Index - This index calculates the average number of times an article has been cited in the same year as it was published. It highlights the immediate impact of the research.
5. Eigenfactor Score - It is a kind of network-based influence metric that weights citations but is based on the prestige of citing journals over a 5-year period. It helps to measure the overall influence of a journal in the scholarly citation network.

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Top Q1 Journals in my related fields.

Category - Artificial intelligence

1. Foundations and Trends in Machine Learning
2. International Journal of Information Management
3. Science Robotics
4. Nature Machine Intelligence
5. Computers and Education: Artificial Intelligence
6. Internet of Things and Cyber-Physical Systems
7. IEEE Transactions on Pattern Analysis and Machine Intelligence
8. IEEE/CAA Journal of Automatica Sinica
9. Annual Review of Control, Robotics, and Autonomous Systems
10. IEEE Transactions on Neural Networks and Learning Systems

Category - Computer Vision and Pattern Recognition

1. Nature Machine Intelligence
2. IEEE Transactions on Pattern Analysis and Machine Intelligence
3. Medical Image Analysis
4. AI Open
5. Computational Visual Media
6. International Journal of Computer Vision
7. Pattern Recognition
8. Foundations and Trends in Computer Graphics and Vision
9. CAAI Transactions on Intelligence Technology
10. IEEE Robotics and Automation Letters

Category - Software

1. Foundations and Trends in Machine Learning
2. Nature Machine Intelligence
3. IEEE Transactions on Cybernetics
4. Information Fusion
5. IEEE Transactions on Pattern Analysis and Machine Intelligence
6. IEEE Transactions on Neural Networks and Learning Systems
7. Journal of Manufacturing Systems
8. Information Systems Journal
9. IEEE Transactions on Evolutionary Computation
10. IEEE Transactions on Systems, Man, and Cybernetics: Systems

Category - Computer Science Applications

1. Nature Biomedical Engineering
2. Science Robotics
3. GigaScience
4. Computers and Education: Artificial Intelligence
5. Journal of Operations Management
6. Wiley Interdisciplinary Reviews: Computational Molecular Science
7. MIS Quarterly: Management Information Systems
8. IEEE Transactions on Wireless Communications
9. IEEE Transactions on Cybernetics
10. IEEE Wireless Communications

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The impact of a published research paper can be evaluated using citation-based metrics and several alternative indicators. These indicators help the user to determine how widely a research paper has been read, cited, and has relevance to the domain. There are certain traditional citation-based metrics like -

1. Citation Count - This metric calculates the count or the total number of instances where the current paper has been cited by other articles/research papers/review papers. It is a straightforward metric, visible, and direct.
2. Field-Weighted Citation Impact (FWCI) - It compares the citations received for the given research paper with the world average for similar types of publications.
3. h-index - It is more of an author-level metric. The word h in h-index refers to the fact that the researcher has published h research papers and each of them has been cited h number of times.
4. JIF (Journal Impact Factor) - This metric calculates the average number of citations for articles that gets published in a journal.
5. Scopus Citation Tracking - It monitors the citation performance over time.

PlumX Metrics - It is a good alternative metric, developed by Elsevier, that measures the research impact beyond traditional citations. It has 5 main categories, which include Citations, Usage, Captures, Mentions, and Social Media. It is mainly helpful to measure the early impact, even before the citations starts getting accumulated. Further, it tracks the impact across various platforms and tends to capture the public engagement with the research paper. Finally, it acts as an important academic evaluation too.

1. Citations - Citations in scholarly databases and patent citations.
2. Usage - Abstract views, full-text downloads, clicks, and library holdings.
3. Captures - Bookmarks, favourites, and readers.
4. Mentions - Blog posts, news articles, and Wikipedia references.
5. Social Media - X posts, Facebook shares, and Reddit discussions.

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I already have an account on ResearchGate. How can it help me in my research?

1. Access - Primarily, ResearchGate has been helping me to access and follow different research publications relevant to my domain. As per the copyright permissions, it allows me to upload and share my preprints and other papers. For papers, where the entire full-text is not available publicly, we can even request the authors personally to share the full-text articles. It has a good recommendation engine that helps to discover related ongoing research in the domain where I am either interested or already working in.

2. Networking - It helps to follow any specific person of interest, topics, or journals and can keep you updated as and when required. Acts a connection between researchers worldwide. You have the ability to follow the experts of your domain or your research area. You will get continuous notificatiuons, firsthand and dont' have to worry about latest trends. There are several research labs, you can join their discussions and communities. Feel free to interact with them and if possible, work in their open-source projects to establish connections. Importantly, you can find future collaborators for your project or grant.
3. QnA - There is a separate Q and A section in RG where you can ask questions related to theory or methodology. There are experts from various fields and disciplines to answer your queries. If you yourself have sufficient knowledge, feel free to disseminate them by contributing to the answers. It is particularly useful for getting responses for your research problems quickly.
4. Tracker - ResearchGate has a unique way to measure the research impact. It works on a point-based system. Points can be gained from reads (how many people have viewed your abstract/downloaded your work), citations, recommendations, and composite RG Score that reflects the engagement of your work with the society. Overall, it helps to monitor the visibility and continuous engagement of your research piece.

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Already have an ORCiD account.

ORCiD provides a unique digital identifier (kind of an unique ID) that distinguishes every researcher in the world. Mainly, it resolves the issue of name ambiguity and makes sure that your research work is attributed to you only.

- Unique Identifier - Provides a 16-digit number. It distinguishes you from other researchers with similar or same names. It will remain same throughout your life. Does not have change with changing institutions, country, research field, etc. Also, it helps to prevent misattribution of publications.
- Record Keeper - The ORCiD records includes everything journal papers, conferences papers, books, chapters of books, datasets, patents, grants, etc. Kind of acts like a central database and at the same time provides visibility. It provides a public professional profile, like a academic CV. Most importantly, it provides a transparent system and proper credibility for your work.
- Easy Integration - It is quite easy to integrate most of the research related website of journal publishers, funding agencies, universities, academic databases, etc and it saves a lot of time by automatically updating your publication records.

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There are several benefits of Scopus ID which gets automatically created whenever a researcher publishes a paper in a journal, that is indexed in scopus. First and foremost, it helps to track down your publications automatically. Scopus groups all of our indexed publications under a unique author ID. It helps to avoid confusions with similar names, keeps a structured list of the entire work you have done so far. Whenever new papers are published, it automatically updates the profile. Once, the ID has been established, the impact tracking becomes easier. It allows you to see how many times your which paper has been cited, view as the h-index keeps getting updated, monitor the usage trends over time. Since, the Scopus is widely accepted by universities, funding agencies, ranking bodies, and research institutions. Having a scopus ID increases the chances of your discoverability on a global scale and provides international visibility. Crucial fix done by the Scopus ID is resolving the author disambiguations. It is quite possible to have researchers with similar names, initials, or last names. Your unique scopus ID makes sure that each work of yours is correctly attributed to you and there is no mix-up in your citations and your academic record stays clean and accurate. Easily, we can link Scopus ID, with ORCID, Web of Science, etc. and keep a unified academic identity.