

# Research Practice & Ethics

## COMP9011

**Mubashir Husain Rehmani**

Mubashir.Rehmani@cit.ie

Delivered To

MSc Software Architecture and Design

MSc Artificial Intelligence

MSc Information Design and Development

## Week 4

- **Ranking of Journals**
- **Plagiarism**
- **Ethics in Scientific Publications**
- **IEEE ComSoC Best Readings**

# Ranking of Journals – All Disciplines



S.No.	Name of Journal	Impact Factor (IF)
1	CA-A CANCER JOURNAL FOR CLINICIANS	223.679
2	Nature Reviews Materials	74.449
3	NEW ENGLAND JOURNAL OF MEDICINE	70.670
4	LANCET	59.102
5	NATURE REVIEWS DRUG DISCOVERY	57.618
6	CHEMICAL REVIEWS	54.301
7	Nature Energy	54.000
8	NATURE REVIEWS CANCER	51.848
9	JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	51.273
10	NATURE REVIEWS IMMUNOLOGY	44.019

# Ranking of Journals – All Disciplines



S.No.	Name of Journal	Impact Factor (IF)
11	NATURE REVIEWS GENETICS	43.704
12	NATURE REVIEWS MOLECULAR CELL BIOLOGY	43.351
13	NATURE	43.070
14	SCIENCE	41.037
15	CHEMICAL SOCIETY REVIEWS	40.443
16	NATURE MATERIALS	38.887
17	REVIEWS OF MODERN PHYSICS	38.296
18	CELL	36.216
19	LANCET ONCOLOGY	35.386
20	NATURE REVIEWS MICROBIOLOGY	34.648

# Ranking of Journals - Telecommunications



S.No.	Name of Journal	Impact Factor (IF)
1	IEEE Communications Surveys and Tutorials	22.973
2	IEEE WIRELESS COMMUNICATIONS	11.000
3	IEEE COMMUNICATIONS MAGAZINE	10.356
4	IEEE Internet of Things Journal	9.515
5	IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS	9.302
6	IEEE NETWORK	7.503
7	IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS	6.394
8	IEEE Vehicular Technology Magazine	6.145
9	IEEE TRANSACTIONS ON COMMUNICATIONS	5.690
10	IEEE TRANSACTIONS ON MULTIMEDIA	5.452

# Ranking of Journals - Telecommunications



S.No.	Name of Journal	Impact Factor (IF)
11	IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY	5.339
12	IEEE Transactions on Emerging Topics in Computing	4.989
13	IEEE TRANSACTIONS ON MOBILE COMPUTING	4.474
14	IEEE Systems Journal	4.463
15	IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION	4.435
16	IEEE TRANSACTIONS ON BROADCASTING	4.374
17	JOURNAL OF LIGHTWAVE TECHNOLOGY	4.162
18	Internet Research	4.109
19	IEEE Access	4.098
20	BELL LABS TECHNICAL JOURNAL	4.000

# Ranking of Journals – Artificial Intelligence



S.No.	Name of Journal	Impact Factor (IF)
1	IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE	17.730
2	IEEE Transactions on Neural Networks and Learning Systems	11.683
3	Information Fusion	10.716
4	IEEE Transactions on Cybernetics	10.387
5	MEDICAL IMAGE ANALYSIS	8.880
6	IEEE TRANSACTIONS ON FUZZY SYSTEMS	8.759
7	IEEE TRANSACTIONS ON EVOLUTIONARY COMPUTATION	8.508
8	INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS	7.229
9	IEEE TRANSACTIONS ON IMAGE PROCESSING	6.790
10	International Journal of Neural Systems	6.400

# Ranking of Journals – Artificial Intelligence



S.No.	Name of Journal	Impact Factor (IF)
11	Swarm and Evolutionary Computation	6.330
12	IEEE Transactions on Affective Computing	6.288
13	INTERNATIONAL JOURNAL OF COMPUTER VISION	6.071
14	PATTERN RECOGNITION	5.898
15	IEEE Computational Intelligence Magazine	5.857
16	NEURAL NETWORKS	5.785
17	KNOWLEDGE-BASED SYSTEMS	5.101
18	ARTIFICIAL INTELLIGENCE REVIEW	5.095
19	INTEGRATED COMPUTER-AIDED ENGINEERING	4.904
20	APPLIED SOFT COMPUTING	4.873



# Ranking of Journals – Information Systems



S.No.	Name of Journal	Impact Factor (IF)
1	IEEE Communications Surveys and Tutorials	22.973
2	IEEE WIRELESS COMMUNICATIONS	11.000
3	IEEE Internet of Things Journal	9.515
4	IEEE NETWORK	7.503
5	IEEE Transactions on Dependable and Secure Computing	6.404
6	IEEE Transactions on Cloud Computing	5.967
7	Foundations and Trends in Information Retrieval	5.857
8	IEEE Transactions on Services Computing	5.707
9	INFORMATION SCIENCES	5.524
10	IEEE TRANSACTIONS ON MULTIMEDIA	5.452

# Ranking of Journals – Information Systems



S.No.	Name of Journal	Impact Factor (IF)
11	IEEE Transactions on Emerging Topics in Computing	4.989
12	IEEE Transactions on Control of Network Systems	4.802
13	IEEE Transactions on Network and Service Management	4.682
14	IEEE TRANSACTIONS ON MOBILE COMPUTING	4.474
15	IEEE Systems Journal	4.463
16	IEEE Cloud Computing	4.393
17	MIS QUARTERLY	4.373
18	JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	4.292
19	IEEE Journal of Biomedical and Health Informatics	4.217
20	Journal of Cheminformatics	4.154

# Ranking of Journals – Software Engineering



S.No.	Name of Journal	Impact Factor (IF)
1	ACM TRANSACTIONS ON GRAPHICS	6.495
2	IEEE Transactions on Dependable and Secure Computing	6.404
3	IEEE Transactions on Services Computing	5.707
4	IEEE TRANSACTIONS ON MULTIMEDIA	5.452
5	COMMUNICATIONS OF THE ACM	5.410
6	JOURNAL OF NETWORK AND COMPUTER APPLICATIONS	5.273
7	IEEE TRANSACTIONS ON SOFTWARE ENGINEERING	4.778
8	EMPIRICAL SOFTWARE ENGINEERING	4.457
9	ADVANCES IN ENGINEERING SOFTWARE	4.194
10	MATHEMATICAL PROGRAMMING	3.785

# Ranking of Journals – Software Engineering



S.No.	Name of Journal	Impact Factor (IF)
11	IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS	3.780
12	COMPUTER	3.564
13	IEEE MULTIMEDIA	3.556
14	INTERNATIONAL JOURNAL OF ELECTRONIC COMMERCE	3.439
15	COMPUTER-AIDED DESIGN	3.049
16	IEEE SOFTWARE	2.945
17	INFORMATION AND SOFTWARE TECHNOLOGY	2.921
18	VIRTUAL REALITY	2.906
19	IEEE INTERNET COMPUTING	2.891
20	IEEE TRANSACTIONS ON RELIABILITY	2.888

# Ranking of Journals – CS Interdisciplinary



S.No.	Name of Journal	Impact Factor (IF)
1	Journal of Statistical Software	11.655
2	MEDICAL IMAGE ANALYSIS	8.880
3	IEEE TRANSACTIONS ON MEDICAL IMAGING	7.816
4	IEEE Transactions on Industrial Informatics	7.377
5	ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING	7.242
6	COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING	6.208
7	COMPUTERS & EDUCATION	5.627
8	JOURNAL OF NETWORK AND COMPUTER APPLICATIONS	5.273
9	NEUROINFORMATICS	5.127
10	INTEGRATED COMPUTER-AIDED ENGINEERING	4.904

# Ranking of Journals – CS Interdisciplinary



S.No.	Name of Journal	Impact Factor (IF)
11	APPLIED SOFT COMPUTING	4.873
12	COMPUTERS IN INDUSTRY	4.769
13	ENVIRONMENTAL MODELLING & SOFTWARE	4.552
14	ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING	4.392
15	JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	4.292
16	IEEE Journal of Biomedical and Health Informatics	4.217
17	ADVANCES IN ENGINEERING SOFTWARE	4.194
18	Journal of Cheminformatics	4.154
19	Journal of Chemical Information and Modeling	3.966
20	STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION	3.925

Plagiarism is the "wrongful appropriation" and "stealing and publication" of another author's "language, thoughts, ideas, or expressions" and the representation of them as one's own original work.

Source: <https://en.wikipedia.org/wiki/Plagiarism>

# Ethics in Scientific Publications



- My friend belongs to a poor family and he is doing Research (Masters/PhD/Any other research career). He is unable to conduct research and not competent enough. Can I include his name in my research paper?

No!

This is Unethical!



# Ethics in Scientific Publications



- My friend is very busy in his job and he cannot give time to his research. Can I write research paper for him?

No!

This is Unethical!

# Ethics in Scientific Publications



- My friend ABC is very close to me. Can I write his name of my research?

No!

This is Unethical!

- Writing research paper is extremely difficult. What if we three friends sit together and only one work and we include the name of rest of two friends in the research paper without their contribution in the paper?

No!

This is Unethical!

# Ethics in Scientific Publications



- Can I give money to reviewers and/or Associate Editor or Editor-in-Chief and publish my research paper?

No!

This is Unethical!

- I want to make everyone happy in my work place. For instance, ABC works in a department and he wants to make happy the Head of Department. Can he includes the name of Head of Department without his contribution in the paper?

No!

This is Unethical!

- Can we submit the same article in two conferences/journals simultaneously?

No!

This is Unethical!

- In some countries, PhD degree, Funding and promotion to higher grades depend upon the number of research publications. Is it fine if a group of people join together and in the name of collaboration, just include their names in joint publications without contribution?

No!

This is Unethical!

- Is it Ethical to publish in Open Access Journal?

Yes!

This is Ethical!

But it totally depends upon the intention of the researcher!



# Open Access Journals



- Open Access to everyone
- Charge money from the authors
- Issues Related With Open Access Journals

# Subscription Based Journals



- Limited access
- Only subscribers can access the articles
- Do not charge from the authors. Do not charge a single penny from the author. Instead, charge for downloading the papers from institutions or individuals
- Issues Related With Subscription Based Journals