IEEE PES Authoring Webinar

Professor Saifur Rahman
Virginia Tech – Advanced Research Institute, USA

03 March 2015

Authoring Webinar

Presenter
Saifur Rahman, Ph.D.
Professor and Director
Virginia Tech Advanced Research Institute

Education
M.S., Electrical Sciences, State University of New York at Stony Brook, 1975.
B.Sc., Electrical Engineering, Bangladesh University of Engineering and Technology, Dhaka, 1972

Professional Society Activities
- IEEE Member since 1974, Fellow 1998
- Vice president, Publications, IEEE PES, 2001-2003
- Vice President, Publications, IEEE, 2006
- Editor-in-Chief, IEEE Transactions on Sustainable Energy, 2010-2012
- Vice President, Publications, IEEE PES Publications Board, 2012-2013
- Launched, the IEEE Power & Energy Technology Systems Journal (Open Access), 2014
IEEE quality makes an impact

Thomson Reuters Journal Citation Reports® by Impact Factor

**IEEE publishes:**

- 19 of the top 20 journals in Electrical and Electronic Engineering
- 18 of the top 20 journals in Telecommunications
- 7 of the top 10 journals in Automation & Control Systems
- 6 of the top 10 journals in Computer Science, Hardware & Architecture
- 4 of the top 5 journals in Cybernetics
- 3 of the top 5 journals in Artificial Intelligence
- 2 of the top 5 journals in Robotics

The Thomson Reuters Journal Citation Reports presents quantifiable statistical data that provides a systematic, objective way to evaluate the world's leading journals. Based on the 2013 study released June 2014

More info: www.ieee.org/citations
IEEE quality makes an impact
Thomson Reuters Journal Citation Reports® by Impact Factor

IEEE journals are:

#1 in Automation and Control
#1 in Computer Hardware
#1 in Cybernetics
#1 in Electrical Engineering
#1 in Industrial Engineering
#1 in Manufacturing Engineering
#1 in Robotics
#1 in Telecommunications
#2 in Aerospace
#2 in Information Systems
#2 in Imaging Science

The Thomson Reuters Journal Citation Reports presents quantifiable statistical data that provides a systematic, objective way to evaluate the world’s leading journals.

IEEE leads in Patent Citations

IEEE is cited over 3x more often than any other publisher

Top 20 Publishers Referenced Most Frequently by Top 40 Patenting Organizations

Source: 1790 Analytics LLC 2014. Based on number of references to papers/standards/conferences from 1997-2013.

More info: www.ieee.org/patentcitations
The IEEE conference collection continues to grow

Now over 1,300 annual conferences. Over 2.3 million total papers.

Maximize Discoverability with IEEE

Now, over 8 million downloads per month from IEEE Xplore
from over 3 million unique users

Average PDF Downloads Per Month

Source: IEEE Xplore Internal Usage Stats
Today’s Author Workshop

Topics Covered

1. Publishing choices
2. Choose an Audience
3. Paper Structure
4. Ethics
5. Where to Publish
6. Open Access
7. Impact Factor
8. Next Steps

Choices

Audience

Structure

Ethics

Publish

Open Access

Impact Factor

Next Steps
Publish
IEEE journal or IEEE conference?

- A **journal article** is a fully developed presentation of your work and its final findings
  - Original research results presented
  - Clear conclusions are made and supported by the data
- A **conference article** can be written while research is ongoing
  - Can present preliminary results or highlight recent work
  - Gain informal feedback to use in your research
- Conference articles are typically shorter than journal articles, with less detail and fewer references

Audience
1. Are you writing this paper for the sake of writing a paper?

2. Or do you want to show how others can benefit from your work?

Audience

Basic Questions

What IEEE editors and reviewers are looking for

- Content that is appropriate, in scope and level
- Clearly written original material that addresses a new and important problem
- Extension of previously published work
- Valid methods and rationale
- Illustrations, tables and graphs that support the text
- References that are current and relevant to the subject
How does the Review Process Work?

- Editor-in-Chief gets the paper after it goes through content match check (iAuthenticate) and “banned author” check
- If the paper is in scope for the journal, it is assigned to an editor (associate editor)
- Editor assigns the paper to five or more reviewers
- Reviewers send their comments back to the editor
- Editor makes a recommendation to the EIC as follows
  - Accept
  - Revise & Resubmit
  - Reject
- The EIC makes the final decision and informs the corresponding author

Audience

Why IEEE editors and reviewers reject papers

- The content is not a good fit for the publication
- There are serious scientific flaws:
  - Inconclusive results or incorrect interpretation
  - Fraudulent research
- It is poorly written
- It does not address a big enough problem or advance the scientific field
- The work was previously published
- The quality is not good enough for the journal
- Reviewers have misunderstood the article
Structure

Paper Structure

Elements of a manuscript

- Title
- Abstract
- Keywords
- Introduction
- Methodology
- Results/Discussions/Findings
- Conclusion
- References
Paper Structure

Title

An effective title should...
- Answer the reader’s question: “Is this article relevant to me?”
- Grab the reader’s attention
- Describe the content of a paper using the fewest possible words
  - Is crisp, concise
  - Uses keywords
  - Avoids jargon

Good Title

VS.

Bad Title

---

Paper Structure

Good vs. Bad Title

A human expert-based approach to electrical peak demand management

VS

A better approach of electrical peak demand management based on a study of different methods of electric load forecasting
Paper Structure

Abstract

A “stand alone” condensed version of the article
• No more than 250 words;
• Uses keywords and index terms

Good vs. Bad Abstract

The objective of this paper was to propose a human expert-based approach to electrical peak demand management. The proposed approach helped to allocate demand curtailments (MW) among distribution substations (DS) or feeders in an electric utility service area based on requirements of the central load dispatch center. Demand curtailment allocation was quantified taking into account demand response (DR) potential and load curtailment priority of each DS, which can be determined using DS loading level, capacity of each DS, customer types (residential/commercial) and load categories (deployable, interruptible or critical). Analytic Hierarchy Process (AHP) was used to model a complex decision-making process according to both expert inputs and objective parameters. Simulation case studies were conducted to demonstrate how the proposed approach can be implemented to perform DR using real-world data from an electric utility. Simulation results demonstrated that the proposed approach is capable of achieving realistic demand curtailment allocations among different DSs to meet the peak load reduction requirements at the utility level.

Vs

This paper presents and assesses a framework for an engineering capstone design program. We explain how student preparation, project selection, and instructor mentorship are the three key elements that must be addressed before the capstone experience is ready for the students. Next, we describe a way to administer and execute the capstone design experience including design workshops and lead engineers. We describe the importance in assessing the capstone design experience and report recent assessment results of our framework. We comment specifically on what students thought were the most important aspects of their experience in engineering capstone design and provide quantitative insight into what parts of the framework are most important.
**Paper Structure**

**Keywords**

Use in the Title and Abstract for enhanced Search Engine Optimization

- Logical
- Appropriate
- Applicable
- Specific
- Searchable

**Paper Structure**

**Introduction**

- A description of the problem you researched
- It should move step by step through:
  - Generally known information about the topic
  - Prior studies’ historical context to your research
  - Your hypothesis and an overview of the results
  - How the article is organized

- The introduction should be:
  - Specific, not too broad or vague
  - About 2 pages
  - Written in the present tense
Paper Structure

Methodology

- Problem formulation and the processes used to solve the problem, prove or disprove the hypothesis
- Use illustrations to clarify ideas and support conclusions:
  - Tables: Present representative data or when exact values are important to show
  - Graphs: Show relationships between data points or trends in data
  - Figures: Quickly show ideas/conclusions that would require detailed explanations

Paper Structure

Results/discussion

Demonstrate that you solved the problem or made significant advances

Results: Summarizes the Data
- Should be clear and concise
- Use figures or tables with narrative to illustrate findings

Discussion: Interprets the Results
- Why your research offers a new solution
- How can it benefit other researchers professionals
Paper Structure
Conclusion

- Explain what the research has achieved
  - As it relates to the problem stated in the Introduction
  - Revisit the key points in each section
  - Include a summary of the main findings and implications for the field
- Provide benefits and shortcomings of:
  - The solution presented
  - Your research and methodology
- Suggest future areas for research

Paper Structure
References

- Support and validate the hypothesis your research proves, disproves or resolves
- There is no limit to the number of references
  - But use only those that directly support your work (about 30)
- Ensure proper author attribution
  - Author name, article title, publication name, publisher, year published, volume and page number, Digital Object Identifier (DOI)
Ethics

Types of misconduct

Conflict of Interest
- A financial or other relationship with the publication at odds with the unbiased presentation of data or analysis

Author Attribution
- Must be given if you use another author’s ideas in your article, even if you do not directly quote a source

Plagiarism
- Copying another person’s work word for word or paraphrasing without proper citation

Author involvement/contributions
- Include any and all who have made a substantial intellectual contribution to the work
- Do not include minor contributors
Ethics

Ethical publishing

Plagiarism

- Avoid plagiarism
  - Cite and separate any verbatim copied material – but how much?
  - Paraphrase other’s text properly, and include citation
  - Credit any ideas from other sources
  - Familiarize yourself with IEEE Policies

Refer to our Tips Sheet

Duplication, Redundancies & Multiple Submissions

- Author must submit original work that:
  - Has not appeared elsewhere for publication
  - Is not under review for another refereed publication
  - Cites previous work
  - Indicates how it differs from the previously published work
  - Authors MUST also inform the editor when submitting any previously published work

Refer to our Tips Sheet
Where to Publish?

Types

**Traditional Journals** – Users/Libraries pay for access

**Open Access Journals** – Author pays, free download

**Hybrid Journals** – Most articles are traditional, some are open access (author preference)
Open Access Publications

Next Steps

Open Access Opportunity for IEEE Authors (Author pays model)

- IEEE provides 3 open access publishing options to meet the varying needs of authors:
  - New multidisciplinary mega journal
  - 100+ Hybrid journals
  - Fully open access topical journals

http://open.ieee.org/
How IEEE Access can work for you

IEEE Access makes it easy for practitioners, researchers, institutions, funding agencies, and others to make published information available to everyone.

* View a video about IEEE Access

Topical Journal

Power and Energy Technology Systems Journal, IEEE

IEEE Power and Energy Systems Technologies Journal is intended to be a technical journal containing practice-oriented articles focusing on the development, planning, design, construction, maintenance, installation and operation of equipment, structures, materials and power systems for the safe, sustainable, economic and reliable conversion, generation, transmission, distribution, storage and usage of electric energy, including its measurement and control.

Product No: ONL289

NEW FOR 2014

* View list of sponsoring societies

IEEE open access publications are available electronically at no cost.
Are we depending too heavily on Impact Factors?

There is more than one type of Impact Factor
## Journal Summary List

<table>
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<tr>
<th>Rank</th>
<th>Journal Title Changes</th>
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**HIGHLIGHTS**

- Objective view of impact
- Quantifiable, statistical data
- Analysis tools
- Journal Impact Factor

**Journals 1 - 20 (of 247)**

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An Alternative Impact Factor

SJIF Impact Factor

INNO SPACE

Scientific Journal Impact Factor (SJIF) Value for 2013 is 5.098

Impact Factor (5.098)
http://www.sjifactor.inno-space.org/papers.php?id=1264
Index in Google Scholar
http://scholar.google.co.in/scholar?q=uritcc&hl=en&as_sdt=0,25
Index in Academia.edu
https://pedit.academia.edu/uritcc/
URITCC is indexed in Google Scholar, Bidshare, Scirp, Academia, ResearchGate and many more.

Kindly send your paper / manuscript to us by mailing to editor@uritcc.org

Kindly include research area (Ex: Civil Engineering, Electrical Engineering, Marine Engineering) along with your paper

Important Dates
Manuscript Submission : 31 July 2014
Acceptance Notification : Within 7 days
Manuscript Registration : Within 7 days after Review Feedback
Manuscript Publication : Within 5 days after Registration

Publication Charges
Indian Authors : INR 2000
Foreign Authors : 100 USD
Impact Factor is not enough of a metric

- Journal’s reputation in the community is important
- For new and lesser known journals – look at the editorial board, their reputation

Other ways of judging a journal’s value to the engineering community

1. **Number of Downloads** (IEEE uses this information for revenue distribution)
2. **Patent Citations** (Available from IEEE)
Key sites to remember

IEEE Author Tools [IEEE.org/go/authorship]
IEEE Conference Search and Calls for Papers: [http://www.ieee.org/conferences_events/index.html]
IEEE Xplore: [http://ieeexplore.ieee.org]
IEEE Xplore information, training and tools: [http://www.ieee.org/go/clientservices]
IEEE Journal Citation reports: [http://www.ieee.org/publications_standards/publications/journmag/journalcitations.html]

Thank You

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