Publishing, Reporting Research Work

Navin Kumar, PhD

Amrita Vishwa Vidyapeetham , Bangalore Campus

SMIEEE, IETE, IE (India), IAEng (Hk)

IEEE Advancing Technology for Humanity

Research Methodology Workshop @Dayanand Sagar College of engineering (2-3 May 2018)

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Some back ground: Setting context

- Introduction to IEEE
  - Facts and Figures
  - Activities
- Publications

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IEEE Today at a Glance

THE LARGEST PROFESSIONAL ASSOCIATION

Our Global Reach

431,000+ Members

45 Technical Societies and Councils

160+ Countries

Our Technical Breadth

1,400+ Annual Conferences

3,700,000+ Technical Documents

170 Top-cited Periodicals

8

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IEEE Standards

- IEEE nurtures, develops, and advances building global technologies.

Can you name an IEEE Standard?

11

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IEEE Standards

- Consumers around the world enjoy the benefits of IEEE's standards.

Here are a few you may recognize…

Wi Fi	IEEE 802.11
Bluetooth	IEEE 802.15
FireWire	IEEE 1394
UL Environment Sustainable Product Certification Mark	IEEE 1680

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IEEE Publications

- IEEE advances author ideas by publishing research for delivery to key technical audiences.

IEEE is the premier source of journals in our fields of interest.

160+ top-cited periodicals

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IEEE *Xplore*® Digital Library

- IEEE intellectual property, all searchable in one place.
  - Powerful search tools
  - Over 3 million full-text articles and papers
  - Users download more than 8 million documents per month

and many …

17 5/25/2015

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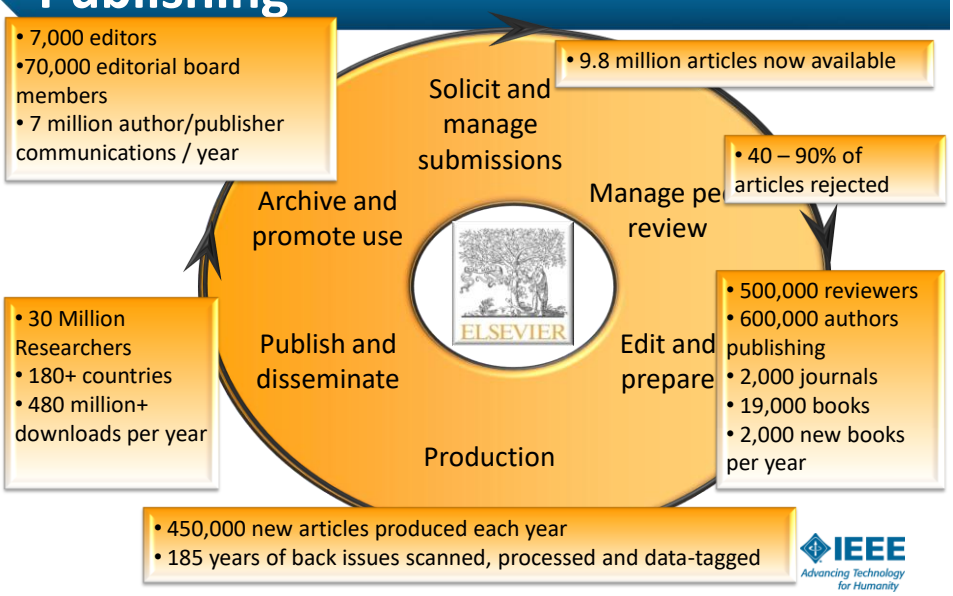
Another Popular: Elsevier and Publishing



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Lets Come Back

Authoring

Publishing Your Research Work

How to write for Technical Periodicals & conferences?

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Outcome(s) of Previous Two Modules

- **Defining a Problem to be Addressed? (Module-1)**
- **Addressing the Problem (Module-2)**
  - Resulted into some outcomes, results (partial or full)

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What to do with results?

- **Publish -> WHAT (new results, Methods),**
  WHY?
  WHERE?
  HOW?
- **Patent**
- **Prepare a report/document it**

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Publishing ?

What is publishing or publication?

- The ***publication*** means the act of publishing.
- **Publishing** is the dissemination of literature, music, or information—the activity of making information available to the general public.
- "Publication" is a technical term in legal contexts and especially important in copyright legislation.
- An author of a work generally is the **initial owner** of the copyright on the work.
- One of the copyrights granted to the author of a work is the **exclusive right to publish the work.**

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Copyrights

- **Copyright?**
- *Copyright*: "a person's exclusive right to reproduce, publish, or sell his or her original work of authorship (as a literary, musical, dramatic, artistic, or architectural work)."
- **Copyright** is a legal right created by the law of a country that grants the creator of an original work exclusive rights for its use and distribution.
- Copyright is a form of intellectual property, applicable to certain forms of creative work.
- **Intellectual property** (**IP**) refers to creations of the intellect for which a monopoly is assigned to designated owners by law. Intellectual property rights (IPRs) are the protections granted to the creators of IP, and include trademarks, copyright, patents, industrial design rights, and in some jurisdictions trade secrets

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Copyright Protected/Not Protected

What is protected under Copyright?	What is not protected?
Literary works (e.g., written works,	Ideas or concepts
source codes of computer programs)	Discoveries
Dramatic works (e.g.,. scripts for films and dramas)	Procedures
Musical works (e.g., melodies) Artistic works (e.g., paintings, photographs)	Methods
Published editions of the above works	Works or other subject matter that have not be made in a tangible form in a recording or writing
Sound recordings Films	Subject matter that is not of original authorship
Television and radio broadcasts Cable programmes Performances	

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Publishing Your Research Work

- **WHO** to publish?
- As a **researcher or practicing engineer**, you know how important it is to publish the results of your work.
  - Researcher – Students (UG/PG), PhD Scholars, Researchers (research assistant/associate), Teacher, Professor….
- It is not just about career advancement or getting recognition.
- Publication is a critical step in the scientific process.
- Your discoveries will foster innovation and help advance technology for public good.
- But that can only happen if your research can be **read, understood, and built upon by your fellow researchers and engineers.**

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Publishing Your Research Work…

- **WHY to publ**
- Career Progression.

Think about how our work will be received a evaluated by our peers

- However, editors, reviewers, and the research community will not consider these reasons when assessing your work.

Accumulate Citation

A "**citation**" is the way you tell your readers th certain material in your work came from another

Ex: The 3G cellular networks, e.g. UMTS [1], are designed to provide voice and data services to mobile users. The sustainable per user data rate is hundreds of kbps limited by the total cell capacity of up to 2-3 Mbps.

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WHY? …

Think about WHY you want to publish your work.

- Is it **new and interesting**?
- Is it a current **hot topic**?
- Have you **provided solutions** to some difficult problems?
- Are you **ready** to publish at this point?

If all answers are "yes", then start preparations for your manuscript

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Publishing Your Research Work …

- **WHAT** and **WHERE** to publish?
- **Original research:** These are detailed studies reporting original research and are classified as primary literature.
- They include hypothesis, background study, methods, results, interpretation of findings, and a discussion of possible implications.
- Example – **Journal, Conference Proceeding, Magazine**
- **Review article:** It gives an overview of existing literature in a field, often identifying specific problems or issues and analysing information from available published work on the topic with a balanced perspective. Often INVITED.
  - These are considered as secondary.

Normally: (i) Conference does not accept REVIEW Article (ii) Very experienced and expert write it.

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WHAT …

- **Letters** (also called *communications*, and not to be confused with *letters to the editor*) are short descriptions of important current research findings that are usually fast-tracked for immediate publication because they are considered urgent.
- **Book Chapter**
- **Book**

Self-evaluate your work. Is it sufficient for a full article? Or are your results so thrilling that they should be shown as soon as possible?

Ask your supervisor and your colleagues for advice on manuscript type.
Sometimes outsiders can see things more clearly than you.

Example: Survey & Tutorial

- **Title: Privacy in the Smart City—Applications, Technologies, Challenges, and Solutions**
- **Abstract:** Many modern cities strive to integrate information technology into every aspect of city life to create so-called smart cities. Smart cities rely on a large number of application areas and technologies to realize complex interactions between citizens, third parties, and city departments. This overwhelming complexity is one reason why holistic privacy protection only rarely enters the picture. A lack of privacy can result in discrimination and social sorting, creating a fundamentally unequal society. To prevent this, we believe that a better understanding of smart cities and their privacy implications is needed. We therefore systematize the application areas, enabling technologies, privacy types, attackers, and data sources for the attacks, giving structure to the fuzzy term "smart city." Based on our taxonomies, we describe existing privacy-enhancing technologies, review the state of the art in real cities around the world, and discuss promising future research directions. Our survey can serve as a reference guide, contributing to the development of privacy-friendly smart cities.
- IEEE Communications Surveys & Tutorials (Volume: 20, Issue: 1, Firstquarter 2018 (**Page(s):** 489 – 516); 267 References

Towards Energy-Efficient Wireless Networking in the Big Data Era: A Survey
Xianghui Cao , Senior Member, IEEE, Lu Liu, Student Member, IEEE,
Yu Cheng, Senior Member, IEEE, and Xuemin (Sherman) Shen, Fellow, IEEE

303 – 332; 221 References.

WHERE: Selecting the Journal

- Look at **your references –** these will help you narrow your choices.
- **Review** recent publications in **each candidate journal**. Find out the hot topics, the accepted types of articles, etc.
- Ask yourself the following questions:
  - Is the journal **peer-reviewed**?
  - Who is this journal's **audience**?
  - What is the **average time to print**?
  - What is the journal's **Impact Factor**?
- Decide on **one** journal.
- **DO NOT submit to multiple journals.**

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Summary: WHAT and WHAT NOT

What to publish:

- New and original results or methods
- Reviews or summaries of particular subject
- Manuscripts that advance the knowledge and understanding in a certain scientific field

What NOT to publish:

- Reports of no scientific interest
- Out of date work
- **Duplications** of previously published work
- Incorrect/unacceptable conclusions

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An international editor says…

"The following problems appear much too frequently"

- *Submission of papers which are clearly out of scope*
- *Failure to format the paper according to the Guide for Authors*
- *Inappropriate (or no) suggested reviewers*
- *Inadequate response to reviewers*
- *Inadequate standard of English*
- *Resubmission of rejected manuscripts without revision*

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The Process & Some Important Considerations

More submissions
→ STRESS for editors and reviewers..

Editors and reviewers are the most precious resource of a journal!

- Editors and reviewers are practicing scientists, even leaders in their fields. They are not professional journal staff – they do journal work on top of their own research, writing and teaching.
- They are busy people who work for journals to contribute to science.
- Editors may receive a small payment, but reviewers are UNPAID.
- Every manuscript takes up their precious time! Nowadays they are working even harder!

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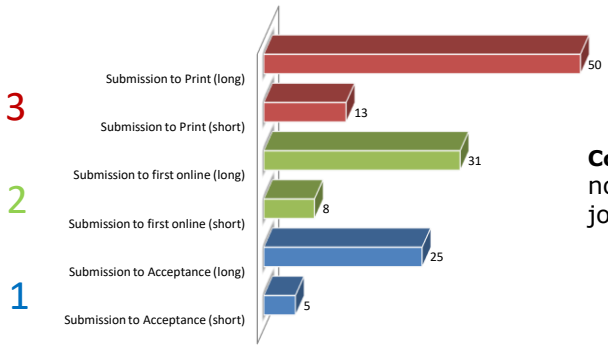
Publishing Speed

Time to publish is important.

Long and short publishing times (weeks)



Conference Proceeding is normally faster than the journals

Many journals have now introduced a "**Fast Rejection**" process by the journal Editor

Impact Factor

What is the Impact Factor (IF)?

[the average annual number of citations per article published]

- **The 2013 impact factor of a journal would be calculated as follows:**
- **2013 impact factor = A/B, where:**
- A = the number of times that all items published in that journal in 2011 and 2012 were cited by indexed publications during 2013.
- B = the total number of "citable items" published by that journal in 2011 and 2012. ("Citable items" for this calculation are usually articles, reviews, proceedings, or notes; not editorials or letters to the editor).

–e.g. 600 citations / 150 + 150 articles = 2

Impact Factor …

- Let us consider: Nature journal.
- Imagine It has published only 2 journal in the year of 2013, and 10 papers in the year of 2014.
- Now average journals published for two years if 12/2=6.....that is, the Average number of publications of Nature is 6 for 2013 and 2014 consecutive years
- Now for the same years (2013-2014) those 12 journals cited by 600 times (by anyone in the world from anywhere).
- Now the two years impact factor is 600/6=100
- So, Impact factor of Nature Journal is 100. (according to this example)

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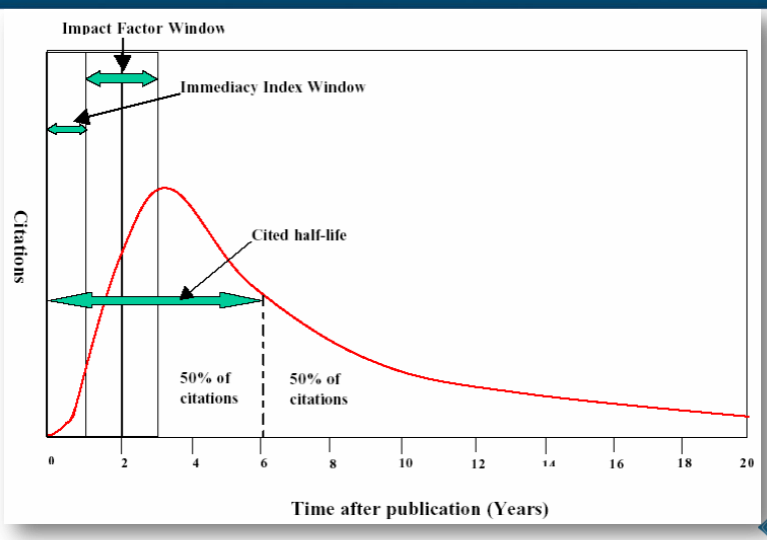
Impact Factor and other bibliometric parameters



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What makes a good manuscript?

- Contains a **clear, useful, and exciting scientific message.**
- **Flows in a logical manner** that the reader can **follow**.
- Is **formatted to best showcase** the material.
- Is written in a style that **transmits the message clearly.**

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A Word about Your Words

This is NOT creative writing class.

Journal space is precious.

Be concise.

If clarity can be achieved in *n* words, never use *n+1*.

More difficult than you imagine!

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What makes a good manuscript?

It is all about the reader. (**Remember editors and reviewers are in this group**!)

- Writing a good manuscript is NOT easy. Be prepared to work hard on it.
  - **Cherish your work** – if you do not take care, why should the journal?
  - There is **no secret recipe for success** – just some simple rules, dedication, and hard work.
  - **Editors and reviewers** are all busy scientists, just like you – make things easy to **save their time!**

Presentation is critical!

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HOW to Publish: The general structure of a full article

- Title
- Authors
- Abstract
- Keywords
- Main text (IMRAD)
  - Introduction
  - Methods
  - Results
  - And
  - Discussion (Conclusions)
- Acknowledgements
- References
- Supplementary material

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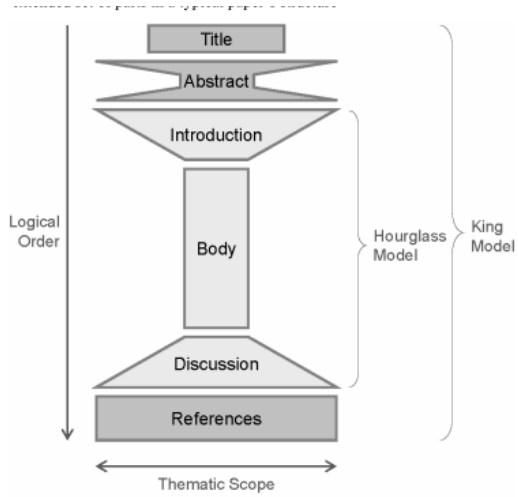
How …



Based on Swales (1993)

HOW…

Our focus will be on:

- Title
- Author(s) list
- Abstract
  - Key words
- Formatting
- Structuring the Paper
  - Introduction
  - Xxx
  - Xxx
  - Conclusion
- References

Title

- The title of the proposed paper is **very important**.
- Short attention - catching titles are the most effective.

The **title and abstract** are often the only parts of a paper that are **freely available online**.
Hence, once readers find your paper, they will read through the title and abstract to determine whether or not to purchase a full copy of your paper/continue reading.

In fact, **Title**, **abstract**, and **keywords**—may well hold the key to publication success.
A negligent or sloppy attitude towards these three vital elements in the research paper format would be almost equivalent to leaving the accessibility of the research paper up to chance

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Title ... Lets take some example

Design and Development of a Rope Climbing Robot Using Four Bar Mechanism with Wireless Control Using TX2/RX2 RF Module

Notice of Violation of IEEE Publication Principles Energy efficient sensing with spectrum opportunity forecasting for cognitive radio networks

Design and fabrication of 430MHz unequal amplitude equal phase power splitter for tropospheric wind profiling radar feeder network

Experimentation and analysis of Multipath TCP

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Title…

Typically 10–12 words long (Max. **75 Characters**)
It is also important, for a conference paper, to ensure that the ***title describes the subject you are writing about.***

Design and Development of a Rope Climbing Robot Using Four Bar Mechanism with Wireless Control ~~Using TX2/RX2 RF Module~~

Design and Development of a Wireless Controlled Rope Climbing Robot with Four Bar Mechanism

Design of a Wireless Controlled Rope Climbing Robot with Four Bar Mechanism

Four Bar Mechanism based Wireless Controlled Rope Climbing Robot Design

Title Example …

A cost-efficient protection scheme for service recovery against single shared-risk link group failure in long-reach passive optical network

Experimentation and analysis of Multipath TCP

- Experimental Verification and Evaluation of Multipath TCP

Of course, based on what is the content, what is the intention, we can update.

Author(s)

- Who should be authors?
- Can we have single/multi?
- What is the order of author?

First and **Last author** ….

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Author(s) List

- Template based…

Paper Title* (use style: *paper title*)

Authors Name/s per 1st Affiliation *(Author)*
line 1 (of *Affiliation*): dept. name of organization
line 2: name of organization, acronyms acceptable
line 3: City, Country
line 4: e-mail address if desired

Authors Name/s per 2nd Affiliation *(Author)*
line 1 (of *Affiliation*): dept. name of organization
line 2: name of organization, acronyms acceptable
line 3: City, Country
line 4: e-mail address if desired

~~Prof, Dean, Research Head, M Tech Student, Research~~ Scholar……

In Transaction paper, you have after ***name…Member or Senior Member or Fellow Member***

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Abstract

- An **abstract** is a self-contained, short, and powerful statement that describes a larger work.
- An **abstract** is a short document that is intended to **capture the interest of a potential reader** of your paper.
- Thus, in a sense it is a **marketing document** for your full paper.
- If the Abstract is poorly written or if it is boring then it will not encourage a potential reader to spend the time reading your work.

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Abstract … Ex.

Abstract: In this paper we experiment and analyze the Multipath TCP (MPTCP) proposed by Internet Engineering Task Force (IETF). The authors consider MPTCP offerings such as multipath aggregation, increased throughput, enhanced resilience, network handover and employing various congestion control algorithms over multipaths to aggregate available bandwidth as key factors to assess experiments with various topologies.

Experimentation and analysis of Multipath TCP

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Abstract …

- Please include the following in your abstract:
  - Presentation title
  - Background/Purpose
  - Aim/Objective
  - Methods
  - Results/Conclusions

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Abstract … Ex.

Abstract: In this paper we experiment and analyze the Multipath TCP (MPTCP) proposed by Internet Engineering Task Force (IETF). The authors consider MPTCP offerings such as multipath aggregation, increased throughput, enhanced resilience, network handover and employing various congestion control algorithms over multipaths to aggregate available bandwidth as key factors to assess experiments with various topologies.

Experimentation and analysis of Multipath TCP

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Abstract …

- Normally written in past tense. (150 (for conf)-250 Words journal)
- With regards the body of the Abstract you need to make a clear statement of the **topic of your paper and your research question.**
- You need to say how your research was/is being undertaken.
- For example, is it empirical or theoretical? Is it quantitative or qualitative? Perhaps it follows the critical research method. What value are your findings and to whom will they be of use?
- The Abstract should then briefly describe the work to be discussed in your paper and also give a concise summary of the findings.
- Finally your Abstract should not include **diagrams** and in general **references are not required** in the Abstract.

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Abstract: Ex …

Resource Allocation and Performance Study for LTE Networks Integrated with Femtocells

Abstract:— Long-Term Evolution (LTE) networks comprising conventional cellular macrocells plus user-installed femtocells offer an economically viable solution to achieving high user capacity and upgrading to future fourth-generation systems. With the growing impetus for frequency reuse, the capacity of each user depends on not only the power spectral density of its own, but also on those of others in neighboring cells. Mitigating interference among macrocells and femtocells requires allocating physical resource dynamically in response to channel conditions. In this paper, we formulate the resource allocation problem as a utility optimization and develop a distributed algorithm for joint power control and user scheduling. The algorithm makes novel use of a class of fairness measures for determining user scheduling and is shown to be very efficient for realistic network parameters. Additionally, using a practical model for the LTE air interface that captures geographic distribution of users and buildings, we provide for a framework that allows comparison of different resource allocation algorithms. A variety of problem formulations, including femtocell density, resource tradeoff, and complexity-optimality tradeoff are derived and analyzed using a geometry-based stochastic LTE air interface model. Our analysis also offers useful guidelines for the planning and design of macrocells and femtocells.

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Abstract …

- Does the abstract capture the interest of a potential reader of the paper?
- **Is the abstract well written in terms of language, grammar, etc.?**
- Does the abstract engage the reader by telling him or her what the paper is about and why they should read it?
- **Does the abstract title describe the subject being written about?**
- Does the abstract make a clear statement of the topic of the paper and the research question?
- **Does the abstract say how the research was/is being undertaken?**
- Does the abstract indicate the value of the findings and to whom will they be of use?
- **Does the abstract describe the work to be discussed in the paper?**
- Does the abstract give a concise summary of the findings?
- **Does the abstract conform to the word limit of 300 words? (in case of journal -150 in conference)**
- Does the abstract have between 5 and 10 keywords or phrases that closely reflect the content of the paper?
- Should the abstract be accepted?

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Keywords

- 3 or up to 6.

Keywords—component; formatting; style; styling; insert (*key words****)***

Should be searchable, the Main words, and this word must have appeared many times in your text itself.

People use the keywords to search the contents. Keep this in mind.

We write the paper, publish it…**do you know why?**

Not for the sake of publishing and showing your HoD, your boss, or your director. Not for promotion…not for degree…of course, all of these you get…..but our objective should be something different. What?

To show the scientific group (entire world) that we have got some new results,… check it, comment, use it, implement it..

And most important is people should CITE your work.

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INTRODUC

Readers/reviewers looks for Introduction after Abstract and Conclusion.

In this also, **4th paragraph**.

Normally, there are **5 paragraphs** – **Basic Background including applications, importance etc**; **Coming slowly towards the topic of interest; what is available related to this topic and what is(are) current challenge(s); what we have addressed and how it is different from any other existing; and finally, the contents of the rest of the paper.**

Performance Analysis of OFDM mmWave Communications with Compressive Sensing Based Channel Estimation and Impulse Noise Suppression

***Abstract*—Millimeter Wave (mmWave) channel estimation can be treated as a sparse signal recovery problem due to the sparse multipath characteristics of the channel. Utilizing compressive sensing (CS) theory, sparse signal recovery algorithms can be designed for channel estimation. However, these algorithms are sensitive to impulse noise, and hence the estimation accuracy degrades under non Gaussian noise. In this paper, we propose a novel algorithm for suppression of impulse noise to improve the system performance. The CS based channel estimation algorithms using pilot subcarriers of orthogonal frequency division multiplexing (OFDM) symbols in conjunction with the proposed impulse noise suppression method is utilized to evaluate the system performance over 60 GHz sparse channels. The mean square error (MSE) and bit error rate (BER) are considered as performance metrics. Comparison with the least squares (LS) estimation method using 4 quadrature amplitude modulation (QAM) OFDM symbols proves the efficacy of the proposed technique.**

***Key words*- Channel Estimation, mmWave, Impulse noise, Compressive sensing.**

I. Introduction

Due to the availability of large bandwidth, millimeter wave (mmWave) communications can provide high data rates of the order of several Gbps, and therefore is a candidate for future wireless communications [1]-[2]. At present, the mmWave band ranging from 30 GHz to 300 GHz is being actively considered in various commercial wireless communication system standards including IEEE 802.15.3c, IEEE 802.11.ad, and IEEE 802.16.1. All of these standards have opted OFDM as their physical layer transmission mechanism because of its high spectral efficiency. Channel estimation is a vital requirement for channel equalization and signal detection in wireless communications. The mmWave channel is reported to be sparse in nature [3]. Hence compressive sensing (CS) based channel estimation techniques may be an attractive solution.

The CS theory introduced by Candes, Tao [4] and Donoho [5] illustrates that the information in signals can be recovered using fewer measurements for compressed or sparse signals. Thus, when the pilot symbols for channel estimation are not sufficient, CS theory gives a new solution, and makes it possible to achieve improved channel estimation using less number of subcarriers. Compared to the traditional linear estimation techniques like least squares (LS) method, sparse channel estimation techniques have two major advantages i.e. lower performance bound and higher spectral efficiency.

The impulse noise with non-Gaussian distribution is generated due to power line, car ignition, spark-plug ignition motor, and other electromagnetic radiating motors adversely affects the receiver performance of the OFDM. The generality of the impulse noise in indoor and urban physical channels renders the Gaussian assumption in traditional OFDM channel estimation techniques invalid leading to non-optimal solution. In literature, a few algorithms have been introduced to ameliorate the demodulation performance of OFDM systems in the presence of impulse noise [6-8]. Proposed algorithms in [7, 8] assume known channel and do not directly used to the channel estimation. A method proposed in [6] for OFDM channel estimation under impulse noise is shown to underperform in sparse channel environment. However, CS algorithms are sensitive to impulse noise, severely affecting the channel estimation accuracy. This paper proposes an algorithm for impulse noise suppression to enhance the performance of OFDM based mmWave systems. Further, conventional CS based channel estimation methods utilizing pilot subcarriers of OFDM in conjunction with the proposed impulse noise suppression algorithm are implemented to evaluate the performance of OFDM 60 GHz systems.

The rest of the paper is organized as follows. In Section II, we present the 60 GHz indoor channel model along with the impulse response. Section III presents the mmWave OFDM system model, the impulse noise model and other assumptions used in the paper. The impulse noise suppression algorithm is proposed and channel estimation algorithms based on CS theory are discussed in Section IV. The analytical bit error rate (BER) expressions using Minimum mean square error (MMSE) equalizer are presented in Section V. In Section VI, simulation results illustrating the efficacy of the proposed algorithm are depicted before concluding the paper in Section VII.

II. The 60GHz Indoor Channel Model

The general mathematical structure of 60GHz indoor channel model proposed by IEEE 802.11ad [9] is

$$h(t,\varphi_{ra},\theta_{ra},\varphi_{ta},\theta_{ta}) = \sum_{i} H^{i} C^{i}(t-T^{(i)},\varphi_{ta}-\phi_{ta}^{(i)},\theta_{ta}-\Theta_{ta}^{(i)};\varphi_{ra}-\phi_{ra}^{(i)},\theta_{ra}-\Theta_{ra}^{(i)}) \quad (1)$$

Review ANTS OFDM mmWave_1570292512.pdf

Formatting

- Style, Font, Paragraph,
- Figures, Tables,
  - Image format, Position of the figures/table
  - Caption, Figure/table no…
- Template

  https://www.ieee.org/conferences_events/conferences/publishing/templates.html
- Equation
  - in equation editor
  - Should be numbered (if more than (1))
- Citation

All these show SERIOUSNESS of authors

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Structuring The Paper

- LTE Resource Allocation…
- Rope Climbing Robot
- MIMO VLC

LTE Resource ExPaperResearchMethodo8May.pdf

RopeClimbingRobotExResearchMethod8May.pdf

Magazine

5G SDn Architecture07838015.pdf

Estimation Theory-Based Robust Phase Offset Determination in Presence of Possible Path Asymmetries

IEEE Trans Performance Area Relaying System 08040030.pdf

Current Issue IEEE Transaction in Communication

Anantha K. Karthik and Rick S. Blum

Conclusion

- VII. CONCLUSION

- ~~LTE networks comprising macrocells plus femtocells are beginning to offer economically viable solutions to achieving high user capacity. The above coupled with the growing impetus for frequency reuse, underscores the need for efficient resource allocation mechanisms in such networks~~. In this paper, by formulating the resource allocation problem as an optimization problem we develop a distributed algorithm that makes use of a class of fairness measures for determining user scheduling. As indicated by our results, our algorithm is shown to be very efficient for realistic network parameters. We also propose a realistic air interface model for LTE, Macro- and Femto-cell networks. Additionally, we provide formulations that can be used by network designers and engineers to understand the impact of femtocell density, resource tradeoffs, and complexity-optimality tradeoffs and thus assist them with the planning and design of macrocells and femtocells for better return of investment (ROI). As next steps, we propose to analyze the impact of scale and varying mixes of traffic on the overall quality of service.

Conclusion …

- It should not be a repeat of ABSTRACT
- It is your findings and challenges, briefly tackled the challenges.
- Future, what you suggest, what are the scopes…

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Acknowledgment

- ACKNOWLEDGMENT
- The work presented in this paper was supported by the European IST project 4MORE (4G MC-CDMA multiple antenna system On chip for Radio Enhancements [1]).

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References

- How many?
  - Conf (usually, 7-9)
- Which one to be included?
  - Latest and most relevant
- What should be the format?

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References …

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[2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.

[3] I. S. Jacobs and C. P. Bean, "Fine particles, thin films and exchange anisotropy," in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.

[4] K. Elissa, "Title of paper if known," unpublished.

[5] R. Nicole, "Title of paper with only first word capitalized," J. Name Stand. Abbrev., in press.

[6] Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, "Electron spectroscopy studies on magneto-optical media and plastic substrate interface," IEEE Transl. J. Magn. Japan, vol. 2, pp. 740–741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, p. 301, 1982].

[7] M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.

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THESIS REPORT

Performance Analysis of ……

- Chapter -1 (INTRODUCTION)
- Chapter -2 (STATE OF ART)
- Chapter -3 (DESIGN AND ANALYSIS)
- Chapter -4 (RESULT AND DISCUSSION)
- Chapter -5 (CONCLUSION AND FUTURE WORK)
- References
- Appendix (if any)

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Hardware Design and Demonstration of ……

- Chapter -1 (INTRODUCTION)
- Chapter -2 (STATE OF ART)
- Chapter -3 (HARDWARE DESIGN AND IMPLEMENTATION)
- Chapter -4 (DEMONSTRATION AND EVALUATION)
- Chapter -5 (CONCLUSION AND FUTURE WORK)

References

Appendix (if any)

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THANK YOU !

Contact me AT:

navinkumar@ieee.org

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