How to get your paper accepted at IM/NOMS

IM 2009 - Ph.D. Track

June 3td 2009

Hofstra University

Long Island, New York, USA

Aiko Pras

University of Twente

a.pras@utwente.nl

Information Society Technologies

EMANICS

Overview

1) Writing your paper
   - Writing style
   - Paper structure
   - References
   - Common mistakes
2) Submitting your paper
3) The review process
   - The reviewer
   - The TPC meeting

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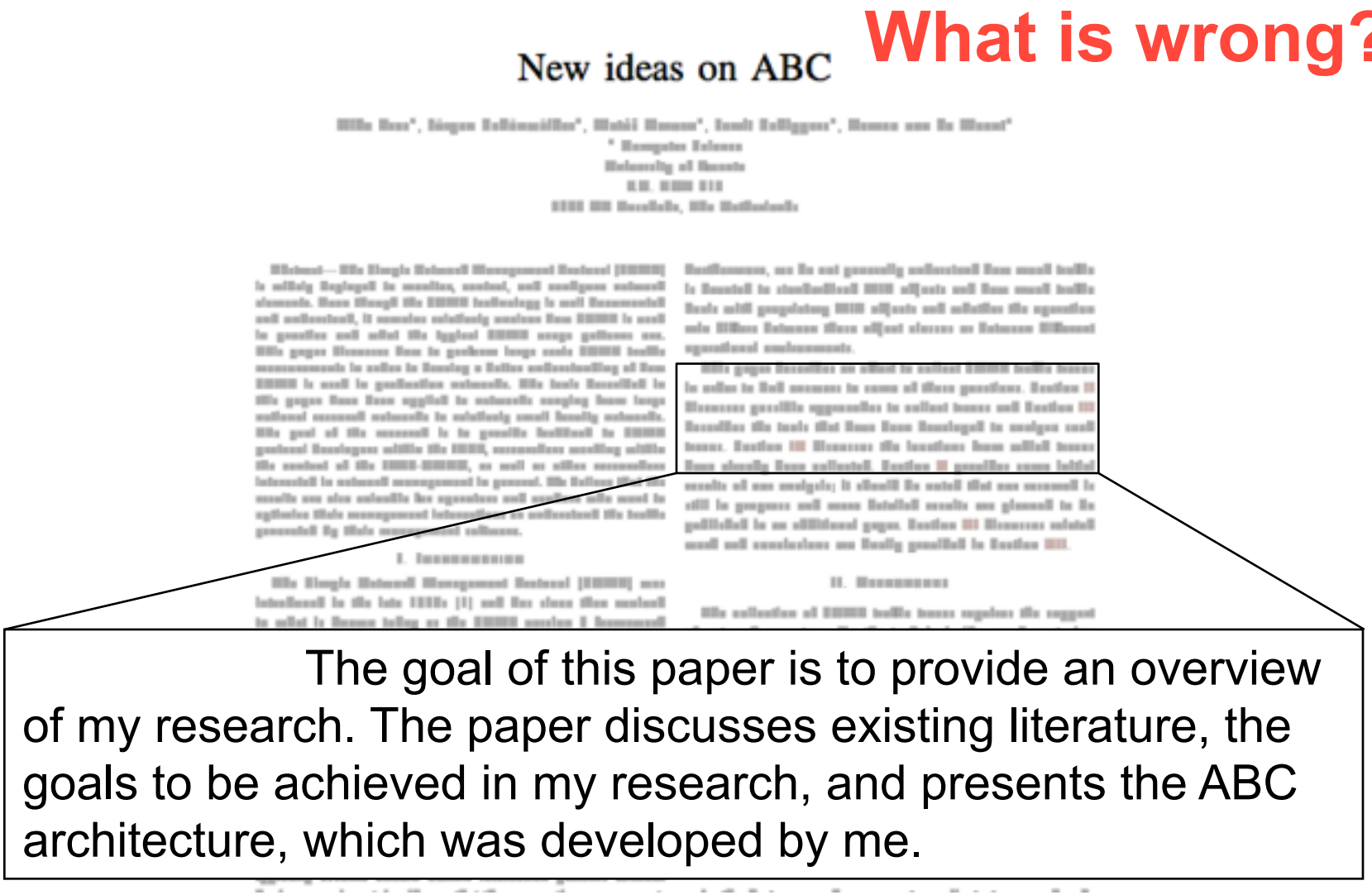
What is wrong?



Writing style

Why would someone be interested in your work?

It is YOUR task to make the reader interested!

Put yourself into the position of the reader

- Have a clear idea about your target audience
- What will your reader already know?

Explain your contribution in a few lines

- Elevator pitch

How to get the reader interested?

1. Include pictures of scarcely dressed students
2. Include many figures
3. Include some research questions
4. Reference the reviewer's work
5. Include many equations

Include some research questions

- Triggers the reader to think first
- Forces the author to formulate the key contributions in a precise way
- Helps to explain the research approach and paper's structure
- Allows meaningful conclusions

New ideas on ABC

[illegible]

The goal of this paper is to investigate how SNMP is used in practice. In particular, the following questions will be investigated:

1. Is SNMP primarily used for monitoring, or is it also used for configuration purposes?

2. Is management primarily based on standardized, or on vendor-specific MIB objects?

3. Is security an issue in network management? In other words, is SNMPv3 being used in practice?

II. Related work

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Structure of paper

Abstract
- Contribution

1. Intro
- context of your work / motivation for research in this area (broad)
- what is the specific problem this paper focuses on
- research questions (3 to 6)
- approach / how will you answer these questions
- paper organization

2. Contents

X-1. Contents

X. Conclusions

X+1 References

New ideas on ABC

[redacted]

[redacted]

I. Introduction

[redacted]

II. Related work

[redacted]

contribution

Research questions

approach

Context / motivation

structure

Specific problem

V. Conclusions

General conclusion

Answer research question 1

Answer research question 2

Answer research question 3

Further work

Between intro and conclusions ...

Depends on the kind of paper:

- Measurement paper
- Design paper
- Survey paper

Measurement paper

Possible structure:

- Chapter 1: Introduction
- Chapter 2: Measurement tools
- Chapter 3: Measurement environment
- Chapter 4: Results
- Chapter 5: Discussion
  - relation to earlier work / literature
- Chapter 6: Conclusions
- References

Design paper

Possible structure:

- Chapter 1: Introduction
- Chapter 2: Existing literature
- Chapter 3: New architecture
- Chapter 4: Implementation
- Chapter 5: Measurements
- Chapter 6: Conclusions
- References

What is wrong?

Design paper

Possible structure:

- Chapter 1: Introduction
- Chapter 2: Requirements
- Chapter 3: Existing solutions
- Chapter 4: New architecture
- Chapter 5: Verification
- Chapter 6: Conclusions
- References

Possible requirements:
- High performance
- Scalable
- ...

- Demonstrate existing solutions do not satisfy the requirements
- Explain small fixes are impossible

➡ discussion of literature

Verify requirements are met:
- Qualitative
- Quantitative:
  - Analytical model
  - Simulation
  - Prototype and measurements

Compare to existing solutions

Information Society Technologies

EMANICS

Survey paper

Possible structure:

- Chapter 1: Introduction
- Chapter 2: Paper 1
- Chapter 3: Paper 2
- Chapter 4: Paper 3
- Chapter 5: Paper 4
- Chapter 6: Conclusions
- References

What is wrong?

Survey paper

Possible structure:

- Chapter 1: Introduction
- Chapter 2: Literature search
- Chapter 3: Architecture / Taxonomy
- Chapter 4: Aspect 1
- Chapter 5: Aspect 2
- Chapter 6: Aspect 3
- Chapter 7: Conclusions
  - Lessons learned
- References

Explain how you found literature
- Web search (scholar, ...)
- Web of Science / Scopus
- Citations

Discuss literature:
- General approaches
- Approaches specific for our context

- What will we do the same
- What will we do different

Example: survey of Internet in planes

...

Chapter 3: Architecture

- Communication within a plane
- Communication to ground stations
- Security
- Performance

Chapter 4: Communication within a plane

Chapter 5: Communication to ground stations

Chapter 6: Security

- 6.1: General security approaches
- 6.2: Specific security problems in planes

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Be consistent!

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REFERENCES

[1] J. Schönwälder. SNMP Traffic Measurements. Internet Draft <draft-irtf-nmrg-snmp-measure-14.txt>, May 2007.

[2] Pavlou G., Flegkas P., Gouveris S., and Liotta A. On Management Technologies and the Potential of Web Services. *IEEE Communications Magazine*, 42(7):58–66, July 2004.

[3] J. Schoenwaelder. Characterization of SNMP MIB Modules. In *Proc. 9th IFIP/IEEE International Symposium on Integrated Network Management*, pages 615–628. IEEE, May 2005.

[4] The SimpleWeb, http://www.simpleweb.org./.

[5] A. Corrente and L. Tura. Security Performance Analysis of SNMPv3 with Respect to SNMPv2c. In *Proc. 2004 IEEE/IFIP Network Operations and Management Symposium*, Seoul, Apr. 2004.

[6] Drevers T., van de Meent R., and Pras A.: Prototyping Web Services based Network Monitoring. *Proc. 10th EUNICE Summer School and IFIP WG6.3 Workshop*, pages 135-142, Tampere, Jun. 2004.

[7] X. Du, M. Shayman, and M. Rozenblit. Implementation and Performance Analysis of SNMP on a TLS/TCP Base. In *Proc. 7th IFIP/IEEE International Symposium on Integrated Network Management*, pages 453–466, Seattle, May 2001.

[8] R. Frye, D. Levi, S. Routhier, and B. Wijnen. Coexistence between

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References

- Be consistent!
  - Example: http://www.tvu.ac.uk/lrs/guides/harvard.html
  - Bibtex can be useful (Google Scholar)
- If possible, avoid referencing Internet-drafts
- Reference the sources, not derived work
  - RFC, and not a book by some author
  - RFC of latest standard, not a historic version
- Do not create obvious references
  - No need to reference http://www.ietf.org/

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Common mistakes

- Violation of IEEE Policy on Self Plagiarism:

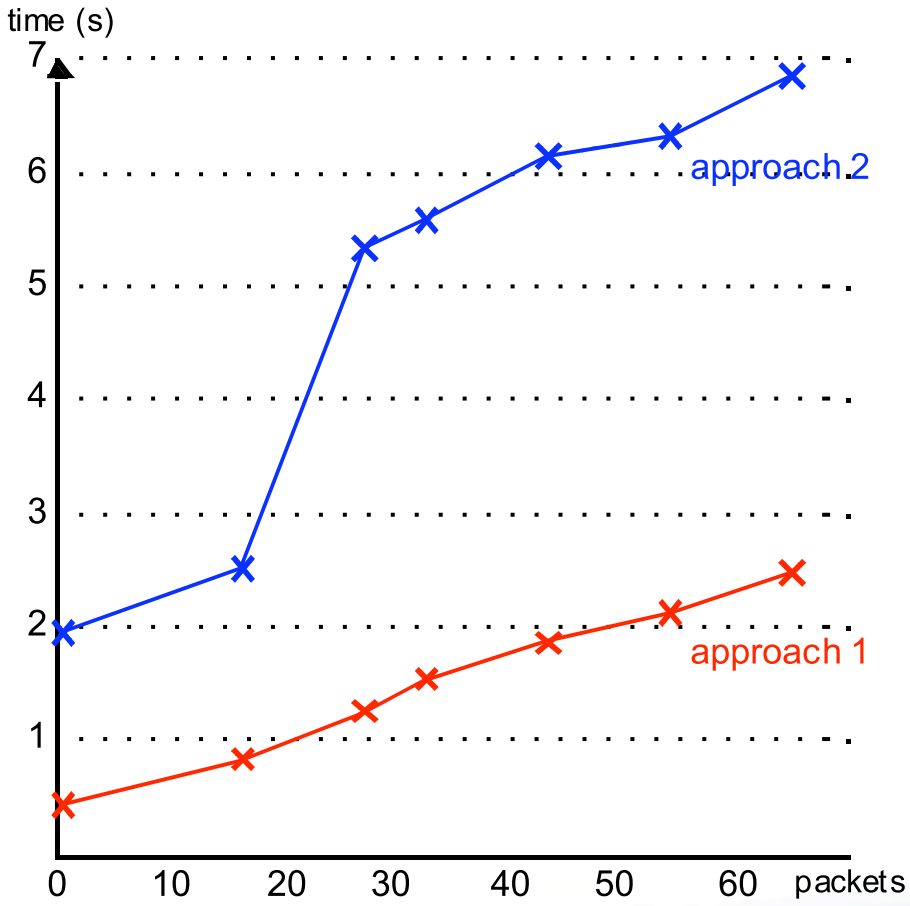
  If authors have used their own previously published work(s) as a basis for a new submission, they are required to cite the previous work(s) and very briefly indicate how the new submission offers substantial novel contributions beyond those of the previously published work(s).

Common mistakes

- Paper does not follow the author's guidelines
- Text contains errors:
  - Ask English native speaker
  - Use MS-Word (Framemaker, ...): grammar & spelling check
- Figures are hardly readable:
  - Take care with PDF: press versus screen quality
    - Before submission, print paper on black & white paper
- Too much information is put into the paper
  - Less is more!
  - ***"I would have sent you less if I had had time"***
    (Kurose, Pascal, Goethe, Cicero, ...)
  - *"Not that the story need be long, but it will take a long while to make it short." Thoreau*

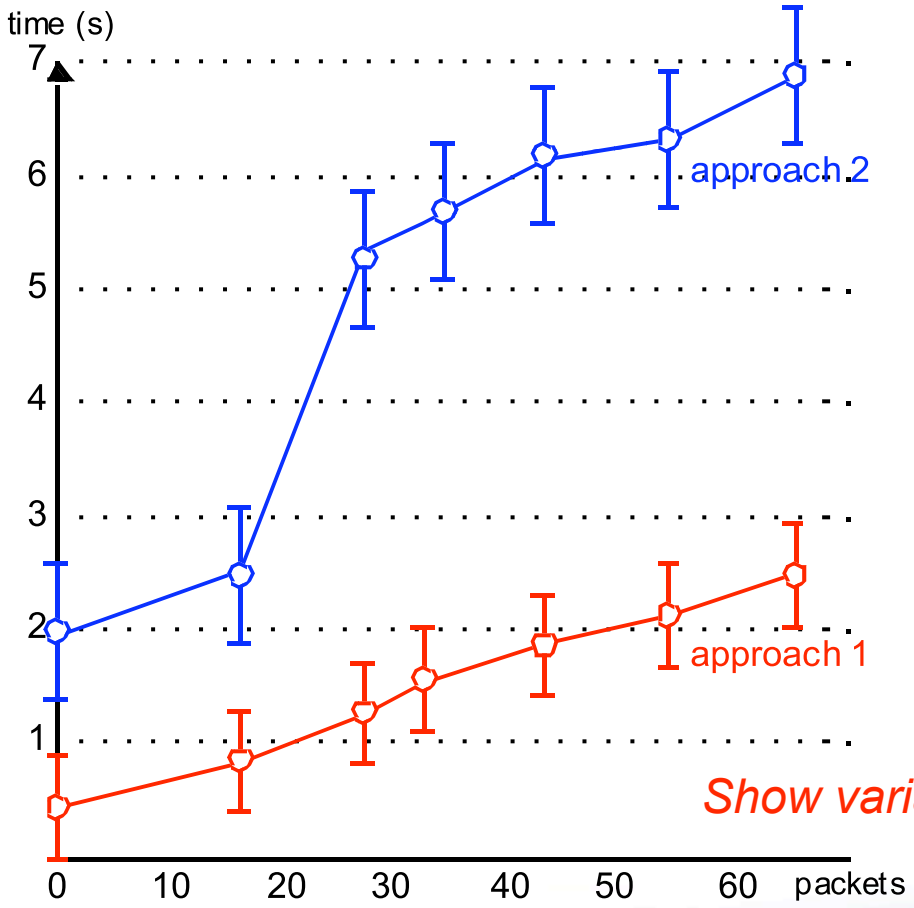
Example

Performance comparison between two approaches



Example

Performance comparison between two approaches



Show variance / error margin

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Where to submit

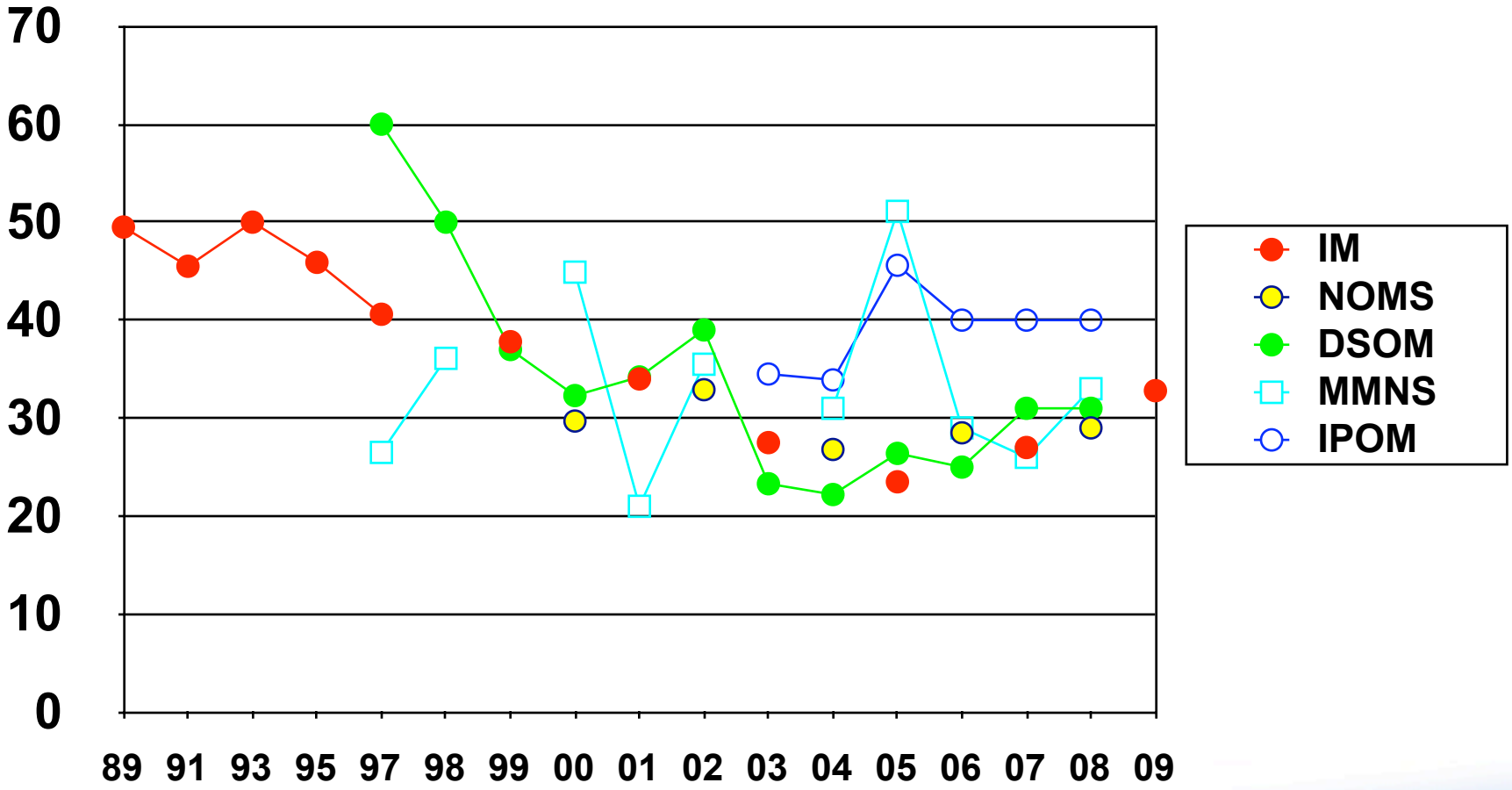
- Workshops and Summer Schools
  - E2EMON, BDIM, BcN, FeBID, MUCS, ACNM, MACE, EVGM (Co-located with IM / NOMS / Manweek)
  - AIMS Student workshop
  - EUNICE Summer School
- Conference
  - IM / NOMS
  - Manweek: DSOM, MMNS, IPOM
- Journal
  - IEEE Communications Magazine: Series on N&S Management
  - IEEE Transactions on N&S Management
  - JNSM
  - International Journal of Network management
  - IEEE Network, ToN, JSAC, ...

Where to submit

- IFIP 6.6 / Emanics / Simpleweb RSS feed
  - http://www.simpleweb.org/cfp.rss
- IEEE CNOM list
  - http://cnom.lrg.ufsc.br/
- IEEE ComSoc list
  - http://www.comsoc.org/confs/index.html
- TCCC mailing list
  - tccc@cs.columbia.edu
  - https://lists.cs.columbia.edu/mailman/listinfo/tccc
- IFIP Lists
  - http://www.ifip.or.at/cal_even.htm
- IFIP TC6 list
  - http://ifip.informatik.uni-hamburg.de/ifip/tc/6/events

Acceptance rate conferences

source: http://www.cs.ucsb.edu/~almeroth/conf/stats/



Lists of conference publications / citations

Libra:

- Microsoft Research Asia
- http://libra.msra.cn/conf_category_24.htm
- Has similar list for Journals
- Has also author ranking

LIBRA

	Publications	Citations	Citation / publication
INFOCOM	4062	54217	13,35
IM	451	950	2,11
DSOM	205	340	1,66
ICC	1378	1871	1,36
MMNS	252	160	0,63
Globecom	1006	111	0,11
IPOM	76	6	0,08
APNOMS	230	4	0,02
AIMS	60	1	0,02

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The reviewer

How many papers does a conference TPC member typically have to review?

a) 2 papers
b) 4 papers
c) 8 papers
d) 16 papers
e) 32 papers

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c) 8 papers
d) 16 papers
e) 32 papers

The reviewer

How much time does a conference TPC member typically spend per paper?

a) 10 minutes
b) 30 minutes
c) 2 hours
d) 6 hours
e) 1,5 day
f) 4 days

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The reviewer

How much time does an experienced Transactions reviewer typically spend per paper?

a) 10 minutes
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c) 2 hours
d) 6 hours
e) 1,5 day
f) 4 days

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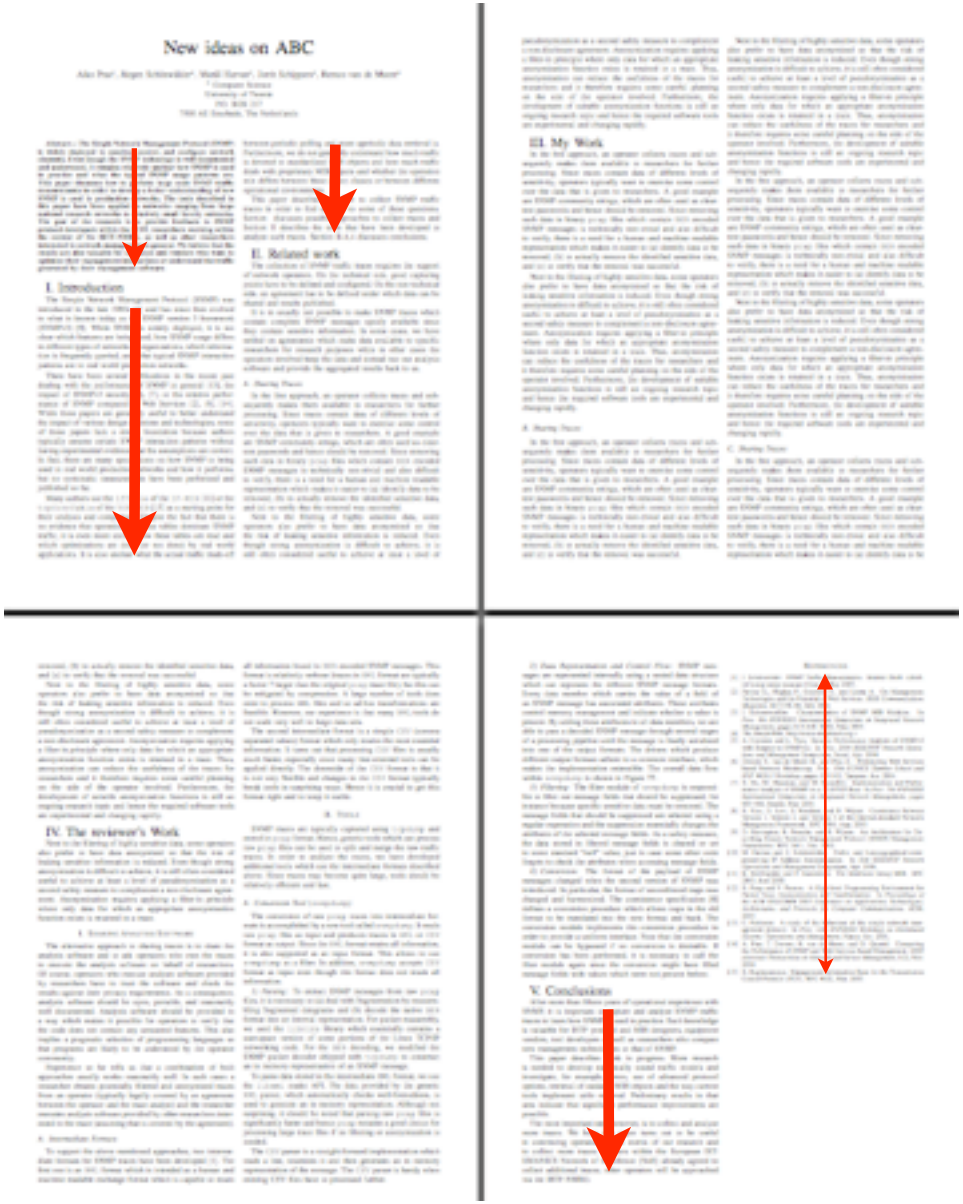

The experienced reviewer

- Reads abstract, intro and conclusions
- Scans references
- Has an initial idea about acceptance / rejection
- Reads the remaining chapters to find evidence

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The TPC meeting

Papers are ranked by the TPC chairs

- Submission systems have automatic facilities for this

Assume 200 papers have been submitted

- Top 10 is accepted without discussion
- Worst 90 are rejected without discussion
- 100 “grey” papers remain to be discussed
- 3 minutes per paper remains

The TPC meeting

How are papers discussed?

- TPC members from the same institute as the authors leave the room
- Discussion started by TPC member who reviewed the paper
- All TPC members can see all reviews
  - they scan reviews for consistency
  - they scan confidential comments to the TPC
  - they scan rebuttal

The rebuttal - Example 1

Assume:

- reviewer 1 and 2 say: accept after minor changes
- reviewer 3 says: reject

Rebuttal 1:

We would like to thank the first reviewer for doing this great review. His comments will surely allow us to further improve the paper. In particular we will include the references to the papers he has mentioned. Also we would like to thank the second reviewer for his useful comments; we will use these comments to correct the typo's. Finally we would like to thank reviewer 3, but would also like to ask him for clarification. We do not really understand his comments with respect to figure 6, since we did not include such picture. Also his comments on section 2 are a bit unclear, since we did not propose an architecture.

TOO LONG!!

The rebuttal - Example 2

Assume:

- reviewer 1 and 2 say: accept after minor changes
- reviewer 3 says: reject

Rebuttal 2:

> We believe reviewer 3 made a serious mistake, and entered the comments for another paper instead of ours. For example, the review refers to figure 6, whereas our paper does not include a figure 6. Also the review refers to an architecture in section 2, whereas our paper does not discuss any architecture.

SUMMARY

- Put yourself in the position of the reader
- Realize reviewers have limited time
- Your introduction and conclusions are vital
- Clearly indicate the contribution of your paper
- Consider formulating research questions
- Be consistent / show you've invested time

QUESTIONS?