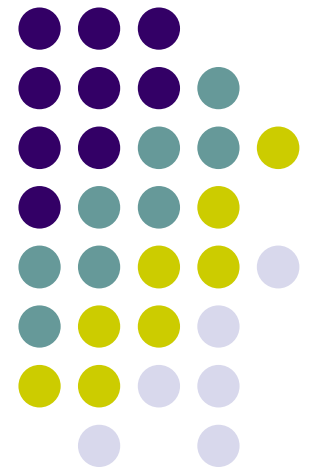
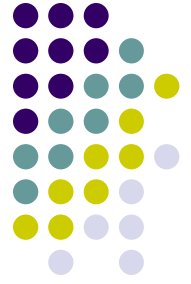


Academic Advice

by Shuai Wang

Department of Computer Science and Technology
Nanjing University

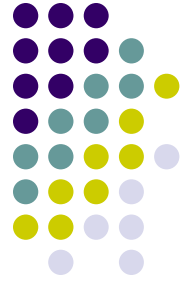




Outline

- Paper Writing
- Presentation
- Background Research (Survey Resource)

Research Paper Writing - Format



- Format is of most importance.
 - Why?
 - All the papers in “*inappropriate*” format will be rejected before the review process (in screening stage).
- Commonly-used format for CS papers
 - ACM format
 - Conference
 - Journal (Transactions)
 - IEEE format
 - Conference
 - Journal (Transactions)



ACM Paper Format

- ACM SIG Proceedings Templates

- Website: <http://www.acm.org/sigs/publications/proceedings-templates>

ACM Word Template for SIG Site

1st Author	2nd Author	3rd Author
1st author's affiliation	2nd author's affiliation	3rd author's affiliation
1st line of address	1st line of address	1st line of address
2nd line of address	2nd line of address	2nd line of address
Telephone number, incl. country code	Telephone number, incl. country code	Telephone number, incl. country code
1st author's E-mail address	2nd E-mail	3rd E-mail

ABSTRACT

In this paper, we describe the formatting guidelines for ACM SIG Proceedings.

Categories and Subject Descriptors

D.3.3 [Programming Languages]: Language Constructs and Features – *abstract data types, polymorphism, control structures*. This is just an example, please use the correct category and subject descriptors for your submission. The ACM Computing Classification Scheme: <http://www.acm.org/class/1008/>

The text should be in two 8.45 cm (3.33") columns with a .83 cm (.33") gutter.

3. TYPESET TEXT

3.1 Normal or Body Text

Please use a 9-point Times Roman font, or other Roman font with serifs, as close as possible in appearance to Times Roman in which these guidelines have been set. The goal is to have a 9-point text, as you see here. Please use sans-serif or non-proportional fonts only for special purposes such as

ragged right. References should be published materials accessible to the public. Internal technical reports may be cited only if they are easily accessible (i.e. you can give the address to obtain the report within your citation) and may be obtained by any reader. Proprietary information may not be cited. Private communications should be acknowledged, not referenced (e.g., “[Robertson, personal communication]”).

3.6 Page Numbering, Headers and Footers

Do not include headers, footers or page numbers in your submission. These will be added when the publications are assembled.

4. FIGURES/CAPTIONS

Place Tables/Figures/Images in text as close to the reference as possible (see Figure 1). It may extend across both columns to a maximum width of 17.78 cm (7”).

Captions should be Times New Roman 9-point bold. They should be numbered (e.g., “Table 1” or “Figure 2”), please note that the word for Table and Figure are spelled out. Figure’s captions should be centered beneath the image or picture, and Table captions should be centered above the table body.

5. SECTIONS

The heading of a section should be in Times New Roman 12-point bold in all-capitals flush left with an additional 6-points of white space above the section head. Sections and subsequent subsections should be numbered and flush left. For a section head and a subsection head together (such as Section 3 and subsection 3.1), use no additional space above the subsection head.

5.1 Subsections

The heading of subsections should be in Times New Roman 12-

The heading for subsections should be in Times New Roman 11-point italic with initial letters capitalized.

6. ACKNOWLEDGMENTS

Our thanks to ACM SIGCHI for allowing us to modify templates they had developed.

7. REFERENCES

- [1] Bowman, M., Debray, S. K., and Peterson, L. L. 1993. Reasoning about naming systems. *ACM Trans. Program. Lang. Syst.* 15, 5 (Nov. 1993), 795-825. DOI=<http://doi.acm.org/10.1145/161468.16147>.
- [2] Ding, W. and Marchionini, G. 1997. *A Study on Video Browsing Strategies*. Technical Report. University of Maryland at College Park.
- [3] Fröhlich, B. and Plate, J. 2000. The cubic mouse: a new device for three-dimensional input. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (The Hague, The Netherlands, April 01 - 06, 2000). CHI '00. ACM, New York, NY, 526-531. DOI=<http://doi.acm.org/10.1145/332040.332491>.
- [4] Tavel, P. 2007. *Modeling and Simulation Design*. AK Peters Ltd., Natick, MA.
- [5] Sannella, M. J. 1994. *Constraint Satisfaction and Debugging for Interactive User Interfaces*. Doctoral Thesis. UMI Order Number: UMI Order No. GAX95-09398., University of Washington.
- [6] Forman, G. 2003. An extensive empirical study of feature selection metrics for text classification. *J. Mach. Learn. Res.* 3 (Mar. 2003), 1289-1305.
- [7] Brown, L. D., Hua, H., and Gao, C. 2003. A widget



IEEE Paper Format

- Templates for Conference Proceedings
 - Website:
http://www.ieee.org/conferences_events/conferences/publishing/templates.html
- Template for Transactions
 - Website:
http://www.ieee.org/publications_standards/publications/authors/authors_journals.html

IEEE Conference Proceeding Format



Preparation of Papers in Two-Column Format for Conference Proceedings Sponsored by IEEE

J. Q. Author
IEEE Conference Publishing
445 Hoes Lane
Piscataway, NJ 08854 USA

Abstract—These instructions give you basic guidelines for preparing papers for conference proceedings.

I. INTRODUCTION

Your goal is to simulate the usual appearance of papers in an *IEEE conference proceedings*. For items not addressed in these instructions, please refer to the last issue of your conference's proceedings or your Publications chair.

Preparing your Electronic Paper

Prepare your paper in full-size format, on US letter paper (8 ½ by 11 inches). For A4 paper, use the A4 settings.

Type Sizes and Typefaces: Follow the type sizes specified in Table I. As an aid in gauging type size, 1 point is about 0.35 mm. The size of the lowercase letter “j” will give the point

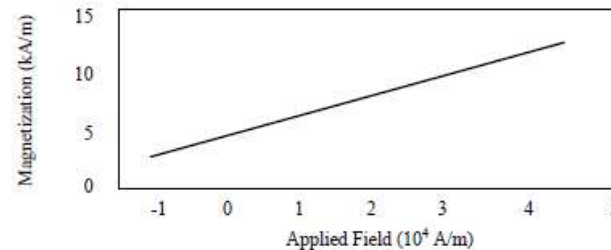


Fig. 1. Magnetization as a function of applied field. Note how the caption is centered in the column.

II. HELPFUL HINTS

A. Figures and Tables

Position figures and tables at the tops and bottoms of

parentheses to avoid ambiguities in denominators. Punctuate equations with commas or periods when they are part of a sentence, as in

$$a + b = c, \quad (1)$$

Symbols in your equation should be defined before the equation appears or immediately following. Use "(1)," not "Eq. (1)" or "equation (1)," except at the beginning of a sentence: "Equation (1) is ..."

E. Other Recommendations

The Roman numerals used to number the section headings are optional. If you do use them, do not number ACKNOWLEDGMENT and REFERENCES, and begin Subheadings with letters. Use two spaces after periods (full stops). Hyphenate complex modifiers: "zero-field-cooled magnetization." Avoid dangling participles, such as, "Using (1), the potential was calculated." Write instead, "The potential was calculated using (1)," or "Using (1), we calculated the potential."

Use a zero before decimal points: "0.25," not ".25." Use "cm³," not "cc." Do not mix complete spellings and abbreviations of units: "Wb/m²" or "webers per square meter," not "webers/m²." Spell units when they appear in text: "...a few henries," not "...a few H." If your native language is not English, try to get a native English-speaking colleague to proofread your paper. Do not add page numbers.

"principal" and "principle." Do not confuse "imply" and "infer." The prefix "non" is not a word; it should be joined to the word it modifies, usually without a hyphen. There is no period after the "et" in the Latin abbreviation "et al." The abbreviation "i.e." means "that is," and the abbreviation "e.g." means "for example." An excellent style manual for science writers is [7].

ACKNOWLEDGMENT

The preferred spelling of the word "acknowledgment" in America is without an "e" after the "g." Try to avoid the stilted expression, "One of us (R. B. G.) thanks ..." Instead, try "R.B.G. thanks ..." Put sponsor acknowledgments in the unnumbered footnote on the first page.

REFERENCES

- [1] G. Eason, B. Noble, and I.N. Sneddon, "On certain integrals of Lipschitz-Hankel type involving products of Bessel functions," *Phil. Trans. Roy. Soc. London*, vol. A247, pp. 529-551, April 1955.
- [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. Magnetism Japan*, p. 301, 1982].
- [7] M. Young, *The Technical Writer's Handbook*. Mill Valley, CA: University Science, 1989.



Editing Tool

- Microsoft Word

- Table & Figure
- Data
 - Excel
 - MATLAB

- Latex - *Recommend!*

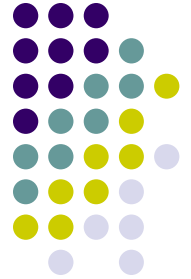
- A typesetting system that is very suitable for producing scientific and mathematical documents of high typographical quality.
- Easy to edit, but not a WYSIWYG tool.
- Tutorial:
 - *“The Not So Short Introduction to LATEX2 ϵ ”*



What makes a good paper?

- Does the paper present a significant and original contribution?
- Does the work demonstrate originality?
- Is the validity of the work adequately demonstrated?
- Is the work clearly and concisely described?

IEEE Transactions on Computers - Review Form



A. Reader Interest

1. Which category describes this manuscript?

- Practice / Application / Case Study / Experience Report
- Theory
- Technology
- Research

2. How relevant is this manuscript to the readers?

- Very Relevant
- Relevant
- Interesting - but not very relevant
- Irrelevant

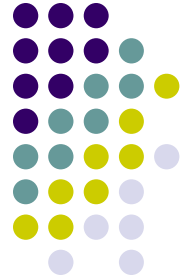
IEEE Transactions on Computers - Review Form



B. Content

1. Please explain how this manuscript advances this field of research and/or contributes something new to the literature.
2. Is the manuscript technically sound?
 - Yes
 - Appears to be - but didn't check completely
 - Partially
 - No

IEEE Transactions on Computers - Review Form



C. Presentation

1. Are the title, abstract, and keywords appropriate?

- Yes
- No

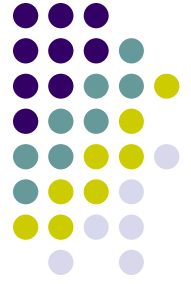
2. Does the manuscript contain sufficient and appropriate references?

- References are sufficient and appropriate
- Important references are missing; more references are needed
- Number of references are excessive

3. Does the introduction state the objectives of the manuscript in terms that encourage the reader to read on?

- Yes
- Could be improved
- No

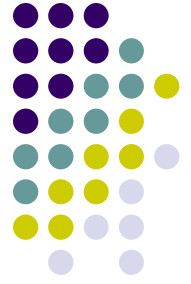
IEEE Transactions on Computers - Review Form



4. How would you rate the organization of the manuscript? Is it focused? Is the length appropriate for the topic?
 - Satisfactory
 - Could be improved
 - Poor

5. Please rate the readability of the manuscript.
 - Easy to read
 - Readable - but requires some effort to understand
 - Difficult to read and understand
 - Unreadable

IEEE Transactions on Computers - Review Form



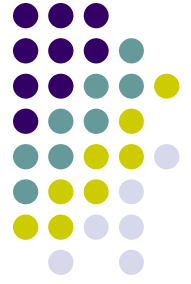
6. Should the supplemental material be included?

- Yes, as part of the digital library for this submission if accepted
- Yes, as part of the main paper if accepted (cannot exceed the strict page limit)
- No, it should not be included at all

7. If yes to 6, should it be accepted:

- As is
- After revisions.

IEEE Transactions on Computers - Review Form



Evaluation

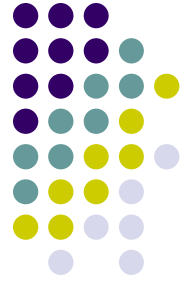
Please rate the manuscript. Explain your choice.

- Award Quality
- Excellent
- Good
- Fair
- Poor



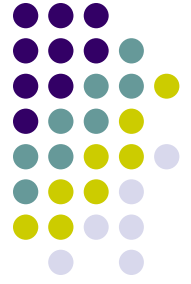
Writing Reference Books

- ***The Elements of Style***, by William Strunk and E. B. White.
 - Easy to read, very useful as the first writing book to read.
 - in its “brevity, clarity, and prickly good sense, it is, unlike most such manuals, a book as well as a tool” - *The New Yorker*
- ***BUGS in Writing: A Guide to Debugging Your Prose***, by Lyn Dupre.
 - Also easy to read, like a manual for checking different issues
- ***Writing for Computer Science***, by Justin Zobel



Structure of a Paper

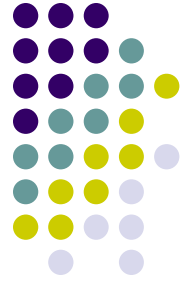
- Introduction
- Approach
- Implementation
- Results
- Evaluation
- Related Work
- Conclusion & Discussion



Presentation (Conference)

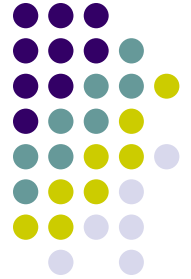
- Practice talks
 - Practice makes perfect.
- Things to Think About
 - Oral Communication is different from written communication
 - K.I.S.S. (Keep It Simple, Stupid)
 - Repeat key insights (Forecast, Tell, Summary)
 - Think about your audience
 - Expert or not?
 - Think about your rhetorical goals
 - Show contribution
 - Prepare
 - Possible questions from audiences

Conference Talk Outline (20-30 min)



- Title/author/affiliation (1 slide)
- Forecast (1 slide)
- Outline (1 slide)
- Background
 - Motivation and Problem Statement (1-2 slides)
 - Related Work (0-1 slides)
 - Methods (1 slide)
- Results (4-6 slides)
- Summary (1 slide)
- Future Work (0-1 slides)
- Backup Slides (0-3 slides)

How to do a survey (Background research)



- Resources:
 - Digital Library
 - ACM Digital Library
 - <http://dl.acm.org/>
 - IEEE Xplore Digital Library
 - <http://ieeexplore.ieee.org/>
 - SpringerLink, etc.



Search Engine

- Google Scholar
 - <http://scholar.google.com/>
- CiteSeerX
 - <http://citeseer.ist.psu.edu/>
- Microsoft Academic Search
 - <http://academic.research.microsoft.com/>

Conferences & Journals (Computer Architecture)



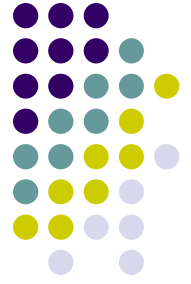
- Top conferences
 - **ISCA** - International Symposium on Computer Architecture
 - **MICRO** - IEEE/ACM International Symposium on Microarchitecture
 - **HPCA** - International Symposium on High-Performance Computer Architecture
 - **ASPLOS** - International Conference on Architectural Support for Programming Languages and Operating Systems
 - **PACT** - International Conference on Parallel Architectures and Compilation Techniques
 - **SIGMETRICS** - International Conference on Measurement and Modeling of Computer Systems
 - **DAC** - Design Automation Conference
 - etc.

Conferences & Journals (Computer Architecture)



- Top Journals/Transactions
 - IEEE Transactions on Computers (TC)
 - IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)
 - IEEE Transactions on Very Large Scale Integration Systems (TVLSI)
 - IEEE Computer
 - ACM Transactions on Architecture and Code Optimization (TACO)
 - ACM Transactions on Computer Systems (TOCS)
 - etc.

Discussion



Questions?