How to *Write* a SIGGRAPH Paper

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A Simple Recipe

- Write a great introduction

- Deliver an exhaustive survey of previous work

- Clearly explain your method

- Show some killer results

- Start making your SIGGRAPH travel arrangements
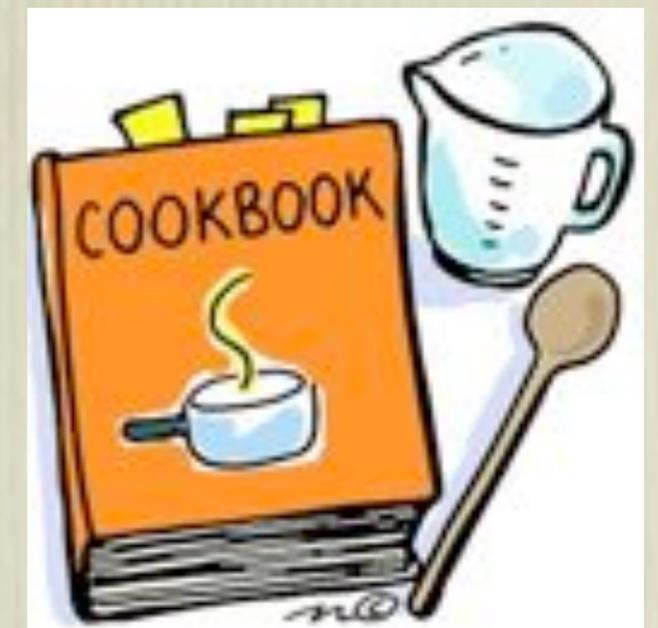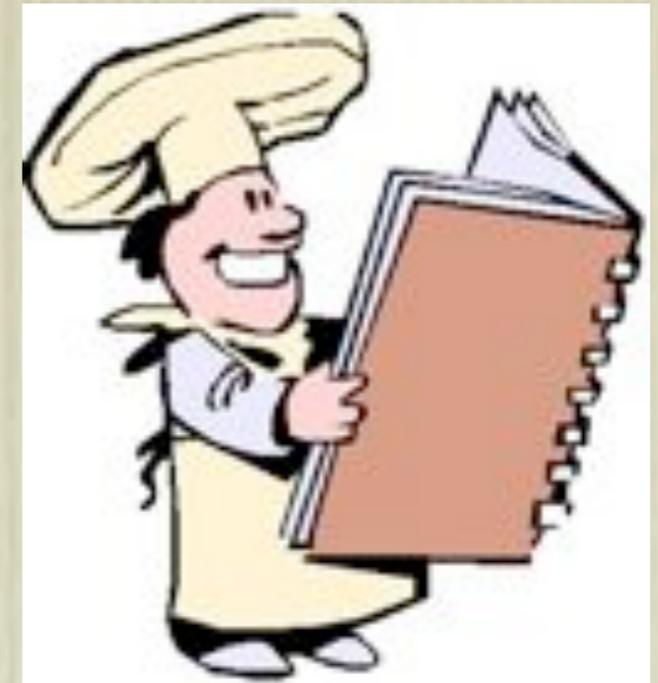
More Seriously...

- Getting intimate with the SIGGRAPH review form.

- How to write a good introduction.

- Examples.

- Additional paper writing tips.

SIGGRAPH Review Form

1. Briefly describe the paper and its contribution to computer graphics and interactive techniques. Please give your assessment of the scope and magnitude of the paper's contribution.

2. Is the exposition clear? How could it be improved?

3. Are the references adequate? List any additional references that are needed.

4. Could the work be reproduced from the information in the paper? Are all important algorithmic or system details discussed adequately? Are the limitations and drawbacks of the work clear?

SIGGRAPH Review Form

- Briefly describe the paper and its contribution to computer graphics and interactive techniques. Please give your assessment of the scope and magnitude of the paper's contribution.

    - Did the reviewer understand what the paper is about?

    - Contribution scope: how important, widely applicable, is the method/analysis in this paper?

    - Contribution magnitude: amount of novelty, originality

SIGGRAPH Review Form

- Is the exposition clear? How could it be improved?

  - If your paper is poorly written, it may get rejected, no matter how important the problem is and how good or novel your ideas are.

  - It is your responsibility to ensure that the reviewers understand your paper. Make their job easier!

  - The logical organization of your paper must be clear. Explain it!

SIGGRAPH Review Form

- Are the references adequate? List any additional references that are needed.

  - Did you cite/discuss any work that the reviewers might feel to be relevant?

  - Think who might be chosen to review your paper. Make sure you cite their relevant works.

  - It's better to over-cite than to under-cite.

  - Be kind/fair, avoid insulting previous methods!

SIGGRAPH Review Form

- Could the work be reproduced from the information in the paper? Are all important algorithmic or system details discussed adequately? Are the limitations and drawbacks of the work clear?

  - Completeness: mention important implementation details, constants, parameter values.

  - Make sure you demonstrate/discuss any drawbacks or limitations! Almost nothing works 100 percent...

Who Cares About the Introduction?

- The importance of the introduction cannot be overestimated!

- Uneducated guess: in over 90 percent of the cases, the reviewer will have made up his mind, while reading the introduction.

Introduction Goals

- What is this paper about?

- What problem(s) does it address?

- Why should the reader/reviewer care?

  - Convince me the problem is important

  - Convince me it has not yet been solved well enough

  - Convince me you have a novel solution

  - *Make me want to read the rest of the paper!*

Possible Introduction Structure (I)

- Starting sentence/paragraph: introduce the broader context for this work, explaining its importance (as general motivation).

- Next paragraph or two: narrow the context down. State explicitly what problem/aspect this paper is concerned with. This should be properly motivated, so as to convince the reader that this is a worthy cause. A concrete example might be helpful.

Possible Introduction Structure (II)

- Hasn't this problem been adequately solved by previous research? Briefly state why the existing approaches still leave room for this work. This sets the ground for stating the contributions of this paper.

- Summarize the approach proposed in this paper. Might make use of the teaser figure.

- Explicitly state the contributions of this work, eluding to the results as necessary. Might make use of the teaser figure.

- State limitations, if any.

Tips - Figures

- Make good use of your figures!

  - Demonstrate the problem you are solving

  - Show the shortcomings of existing methods

  - Visual aids to help explain your approach

  - Demonstrate the quality of your results

- Ideally, the reviewer should understand the point of your paper just from the figures and their captions!

Tips - Keeping Promises

- Maintain a balance between your claims (promises) in the introduction, previous work, etc. and the actual results (proof) that you deliver in the second half of the paper.

- You don't want to overstate your achievements, but do not understate them either!

Tips - Previous Work

- Be thorough

- Be kind/fair

- Support your claims about shortcomings

- Don't just write a "laundry list", discuss how your approach is different/better

Tips - Method

- Provide a high-level overview: a logical "road map" for the exposition of your method

- Expose in a top-down fashion

- Identify the main novel ideas

- Identify less important implementation specifics

Tips - Results

Helpful Tips

- Don't assume the reader will understand on his own what makes your result better than the existing state-of-the-art

- Point out anything that you want to be noticed

- Summarize in words the conclusions from your tables/plots

Tips - Conclusions

- Summarize what you have (but also what you have not) achieved.

- Simply cutting-and-pasting parts of the introduction is considered bad form.

- A nice way to re-iterate the limitations might be to cast them as items for future work.

Good Luck!