Writing English Publications

Tips and Advice

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Outline

- Some quick notes on PowerPoint
- Making your papers interesting
- Dos and Don'ts of English writing
- Common mistakes



Paramount PowerPoint Presentation Practices (PPPPP)

- Only one topic per slide
 - Number your slides
- Broken English is preferred
 - Eg. "The SNR of the ADC is 80dB" → "80dB SNR"
- A picture is worth a thousand words
 - Always make graph Axis large enough to be read
- Presentation etiquette of American audiences
 - Never talk during a presentation
 - Always tell the speaker he/she did a good job (even if the didn't)



Some Tips to improve your papers

- Papers should be organized similar to your presentations
 - Most of the presentations I have seen are better than their written equivalents
- Use references when possible to save space, reference often
- You must "sell" you papers
 - If the reader is not interested it will not get published
- A picture is worth 1000 words



Making your papers more interesting: The Abstract

- Some reviewers only read this. If it is bad they give up.
- It is the most important paragraph in your paper.
- Don't tell the reader what you did...
- Tell they why they should be interested
 - Specific numbers (energy, ENOB, SNR, speed, etc.)
 - Why the paper is novel/important to the field
- Only put what is important to the reader
 - Leave the details for the body of the paper



Example Abstracts (Bad and Good)

In this paper, a signal separation algorithm is applied in RFID reader baseband for anti-collision. A digital baseband simulation platform is defined in Matlab level. A separation algorithm is introduced and modeled in Matlab level. Optimum framed length based on this design is come up with, and a system simulation shows great promotion in system efficiency in this design. The influence of SNR and times of clustering is discussed for better performance.

In this paper, a signal separation algorithm is applied in an RFID reader baseband for anti-collision. When two tags collide, the success rate to decode both of them is over 40% with this work. Optimum framed length based on this design is presented, and a system simulation shows a great increase in system efficiency with this design. With best estimation, the system efficiency can reach over 55%. The influence of SNR and frequency of clustering is discussed to improve performance.

One of My Most Favorite Abstracts (Not Space Limited)

In emerging embedded applications such as wireless sensor networks, the key metric is minimizing energy dissipation rather than processor speed. Minimum energy analysis of CMOS circuits estimates the optimal operating point of clock frequencies, supply voltage, and threshold voltage according to A. Chandrakasan et al. (see ibid., vol.27, no.4, p.473-84, Apr. 1992). The minimum energy analysis shows that the optimal power supply typically occurs in subthreshold (e.g., supply voltages that are below device thresholds). New subthreshold logic and memory design methodologies are developed and demonstrated on a fast Fourier transform (FFT) processor. The FFT processor uses an energy-aware architecture that allows for variable FFT length (128-1024 point), variable bit-precision (8 b and 16 b) and is designed to investigate the estimated minimum energy point. The FFT processor is fabricated using a standard 0.18-µm CMOS logic process and operates down to 180 mV. The minimum energy point for the 16-b 1024-point FFT processor occurs at 350-mV supply voltage where it dissipates 155 nJ/FFT at a clock frequency of 10 kHz.

- Why it is important
- Background

- How it works
- Why it is the best



Making ordered list more interesting

- This is boring!!!
 - First we...
 - Next we...
 - Next we...
 - Next we...
 - Finally we...
 - Section 1 talks about...
 - Section 2 talks about...
 - Section 3 talks about...
 - Section 4 talks about...



- To begin, we...
- Once XXX is complete we...
- After that we...
- The penultimate step is to...
- In the last step we...



- In the preceding section...
- After discussing... we go on to...
- Finally, we explain ... in section 4



Dos

- Use Spellcheck
 - There are different English dialects, pick the correct one (American-US)
 - Eg. "Colour" vs. "Color"
- Use a Thesaurus to make things more interesting
 - http://thesaurus.com/
 - Eg. "This is very bad" -> "This is egregious"
- Define every acronym, even if it is common
 - Eg. "Field Programmable Gate Array (FPGA)"
 - Acronym LETTERS come after definition
- Technical papers should stay concise, to the point
 - Only one sentence needed to say "The SNR is 80dB"



Don'ts

- Don't be afraid to use commas for lists (oxford comma)
 - Eg. "one, two, and three"
 - Eg. "black and white, red and blue, and green"
- Don't make sentences too long.
 - If you have more than one comma, break the sentence into 2 sentences.
- Never start a sentence with the word "And" or "But"
 - Just don't!
 - Native speakers almost never do this.
- Never use the term "a lot"
 - Instead use: "several", "a good deal", "much", etc.



When to use the word "The" and "A"

- These are the hardest words for Chinese students
- "The" is used for an item, not a name ("The" implies a specific item).
 - It can be used for the name of an item though
 - Eg. "I like to play 'Uno'"
 - Eg. "I like to play the 'Uno' game"
- "A" implies a non-specific item
 - Eg. "I would like to play a game"
 - Eg. "I would like to play a game of 'Uno'" (any game will do)
 - Eg. "I would like to play **the** game of 'Uno'" (exactly Uno not Chess)
- If you have neither "A/An" or "The" make sure it is correct.



"A" and "An" with Acronyms

- "A" precedes a word starting with a consonant **sound** and "An" precedes a word starting with a vowel **sound**.
 - Eg. "I played with a ball"
 - Eg. "I played with **an** elephant"
- The way you write it will show people how to say it correctly.
 - Eg. "You must use an ATA"
 - Eg. "You must use a PLA"
 - Eg. "You must use an FPGA" (ef-pe-ge-a)
 - Eg. "You must use a UNI" (you-en-i)
 - Eg. "You must use a FIR" (fur) <- Note: this is the correct pronunciation
 - Eg. "You must use an FIR" (ef-i-ar)



Three of the best ways to get better at English writing

- READ!
- READ!!
- READ!!!

- Read papers that are written by English native speakers
- As you read more, your writing will become more natural
- You will start using phrases and words you have read in your writing



Questions?

• Thank you Jerry for unknowingly letting me use your abstract.

