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FRESHMAN CONFERENCE PAPER, SPRING, 2009

STEP #1: PROPOSAL/ABSTRACT

Compose a 300-450 word Proposal/Abstract clarifying the topic and significance of the paper you will submit to and present at the Ninth Annual University of Pittsburgh Freshman Engineering Conference. **Proposals/Abstracts must be submitted electronically by 8:00 p.m., Thursday, January 15, 2009.** You will receive further submission instructions in class and/or via email.

Your Proposal/Abstract must clearly convey an appropriate topic, must indicate the kinds of technical descriptions and explanations you will include in your conference paper, and must indicate the importance of your topic to immediate and potential audiences. **A minimum of 3 resources must be consulted for the proposal.** Further content, format, and submission requirements and tips appear below.

WRITING A SUCCESSFUL PROPOSAL/ABSTRACT

In most situations in which one would be writing a proposal or an abstract, the proposal or abstract functions as an advertisement for the paper to come. A strong proposal/abstract conveys enough information about the paper to enable its readers to understand what the paper “is about”: what the paper will focus on; what will be explained or portrayed; why the paper’s topic, investigations, explanations and conclusions are significant. An effective proposal/abstract requires a balance between general overview and specific detail.

An Effective Overview

An effective overview gives a clear, **coherent**, picture of the paper-to-come. An overview includes the paper’s topic and the areas of information and significance the paper will address. A well-written overview is **not** simply a list of vague possibilities or sketchy generalities. Rather, an engaging, clarifying overview clearly articulates the paper’s topic, provides a depiction of how the authors will proceed to detail and discuss the topic, and begins to specify how and why the paper’s topic is important to immediate and potential audiences.

- Your proposal must state the topic as specifically as possible. For example “...current, cutting-edge global positioning systems technology and applications in the United States military, and the implications of such technologies for the military in wartime and peacetime...” is an appropriate topic, while “global positioning systems” as a topic is too general to be useful for the scope and requirements of this paper.
- Your proposal must communicate how you will proceed through the paper. For example, you might let readers know that your conference paper will begin with an overview of the most current military GPS technologies and applications, then your paper will describe and explain the actual science and technologies used. Your proposal/abstract might then provide an overview of how you will proceed to describe and explain X device and X application to demonstrate the capabilities of cutting-edge GPS in the military. You might then convey how, in your paper, you will approach and clarify how and why this is an important topic for an engineering conference in 2009.
- Be sure to include in your proposal/abstract information on the kinds of research you will be using. This may include information regarding specific sources (a mention of a particular article in a 2005 issue of *Discover* or *Prism*, for example), and/or communication of the *kinds* of resources you’ll be using (articles from mass market and trade magazines, information from absolutely current aeronautics web sites, and from standard, authoritative textbooks, for example).

Enough Specific Detail

The proposal must convey enough information about the paper for readers and evaluators to know what they will be getting if they accept the paper. If readers and evaluators do not know enough about **the focus, content, and direction of the paper, the proposal will be rejected (which translates into your proposal receiving a low or failing grade)**. Accepting a paper for publication of any kind is a huge investment for the panel of evaluators and for the journal or conference; those making the decision will be discerning about which proposals are clear and compelling enough to merit acceptance.

- In your proposal/abstract, you must provide enough detail to show that you have thought about the topic and know what issues and areas will be important to your ongoing research, explanation, and analyses.
- One way to decide what kinds of specifics to include is to keep in mind your audience of immediate and eventual readers. The evaluators of your proposal are looking for a strong indication that the proposal's authors have a **relevant, appropriate**, significant topic.
- The readers and evaluators of your proposal need to encounter a topic that has been developed from careful preliminary research; readers and evaluators need to see that the paper's authors have an emerging sense of how information and analyses will proceed through the conference paper; readers and evaluators need to encounter the authors' views about the significance of the paper's topic for this particular conference.

The "So What?" Factor

Your proposal must begin to clarify the significance of your topic for immediate and potential audiences.

- Do not leave readers and evaluators guessing about the "so what?" of your chosen topic and the paper you will write on that topic. For example, many of the readers of a paper on the use of GPS in the military may have some knowledge of GPS technologies; some readers may have quite a bit of knowledge about or experience with GPS technologies; some readers may have some knowledge of or experience with using GPS for surveillance purposes; some may have a Magellan or Garmin in their cars and know little more about GPS than how to use that particular device for driving directions. How will your conference paper be important to all these potential readers and conference attendees?
- How will your paper, when presented and, potentially, published, contribute to engineering and to readers and disciplines outside of engineering?

Cohesion = Ongoing Strength and Clarity

Readers and evaluators of your proposal need to encounter strong evidence that you will be submitting a cohesive paper throughout which important connections will be established and maintained. Readers of your proposal will want to see that you have a sense of how each topic area is important to other topic areas and to the paper-as-a-whole.

- A too general topic will make such cohesion impossible because a too general topic will require more information than you can clearly and successfully present. Again, if "GPS technologies" were a proposed topic, the proposal's authors would have an unmanageable task facing them. Where would they begin? Would they be writing about the entire history of the development of GPS? Would the paper be primarily a technical description of satellite and receiver technologies? Will the authors be presenting detailed explanations of technologies and detailed descriptions of civilian applications? Is the paper solely about how GPS "works" or are the authors planning to investigate and comment on social and ethical issues that widespread GPS availability and use might give rise to?
- Keeping with the above example, if the authors understand and articulate their topic as the science and impact of cutting-edge global positioning technologies in the military, then a cohesive, enlightening set of explanations and clarifications can follow. The proposal's authors know that explanations of particular technologies within particular contexts are necessary, and that these explanations will contribute to readers' appreciation of the importance of this technology and the importance of understanding various aspects and applications of this technology.

WORD COUNT, FORMAT, RESOURCES, REFERENCES

Word Count

The proposal/abstract must be between 300 and 450 words. You must meet the minimum 300 words. You cannot exceed 450 words. These requirements will aid you in including sufficient detail without being unnecessarily general, wordy, or imprecise.

Submission and Format

Submit your 300-450-word proposal electronically according to submission instructions you will receive in class and/or via email.

Your Proposal/Abstract must be formatted this way:

Name, 012 instructor, 012 class time (12 pt. Times New Roman)

Name, 012 instructor, 012 class time (12 pt. Times New Roman)

CONFERENCE PAPER TITLE

(14 pt. Times New Roman Bold, all caps, centered)

The body of the abstract/proposal
(No indent for 1st paragraph; 10 pt. Times New Roman, fully justified)
(.75 left and right margins; 1.0 top and bottom margins)

REFERENCES

(12 pt. Times New Roman, bold, small caps, centered)

List references alphabetically.
10 pt. Times New Roman, fully justified.
Provide full, accurate bibliographic information for each reference consulted.
Double-space between each reference.
For example:

Arnow, Grace M. 2004. *Who Orbits There?* Reading, Massachusetts: Addison-Wesley.

“Champions of Innovation.” 2007. Pfizer.com.
http://www.pfizer.com/pfizer/help/mn_research_champions.jsp. Accessed: 9 January 2009.

Feldmann, Michel and Jeannine Henaff. 1989. *Surface Acoustic Waves for Signal Processing*. Boston and London: Artech House.

Lu, Sandra Z. March 2006. “I Spy: Who Controls GPS?” *Popular Science* Vol. 252 (3).

Markhoff, John. 16 January 2006. “Michael Dell Should Eat His Words, Apple Chief Suggests.” *New York Times*. <http://www.nytimes.com/2006/01/16/technology/16apple.html>. Accessed: 9 January 2009.

Nussbaum, Robert L., Kristin Greene. February 2005. “What is Special about the ‘Human’ in Human Genetics.” *American Journal of Human Genetics*.
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1196361>. Accessed: 9 January 2009.

Welcher, Frank J., Ph.D. ed. 2003. *Standard Methods of Chemical Analysis*. Ninth ed. Vol. II, Part A: *Industrial and Natural Products and Noninstrumental Methods*. Princeton, New Jersey: D. Van Nostrand Company, Inc.

Zola, Christine H. June 1998. "A Case for Protected Bandwidth." *IEEE Transactions on Computers*. Vol. 43.

Proposal/Abstract References and Quotations: Further Information

You must consult a minimum of 3 resources to begin developing your paper topic. Your References section, then, should have at least 3 references listed. Of course, as you continue with your work on your Conference Paper, you will need to (and be required to) consult additional resources, but, for now, readers will look for evidence that you did reasonable preliminary research to help form and inform your topic.

- If you quote from any of your resources, you may, at this point in the Conference Paper process, simply put the resource author's last name in brackets after the quote. For example, "quoted material" [Arnow]. In future outlines and drafts of your Conference Paper, you will present in-text and end text references as you did last semester—numbered sequentially.
- As always, quoting or paraphrasing without proper reference = plagiarism.
- A Proposal/Abstract that is nothing but quotes and paraphrases (even if properly referenced) will not show sufficient evidence of the authors' understanding of their own topic. A Proposal/Abstract that consists of mostly quoted or paraphrased material will not "be accepted" (will receive a failing grade).