

CS 455 Final Paper: Wireless Networking

Assigned: Fri, Oct 27, 2006

Due: Fri, Dec 8, 2006 *at the beginning of class*

The main purpose of this project is to integrate the theoretical concepts you learn in class with real-world developments. Since trade journals (*e.g.*, *Computer World*, *ACM Queue*, *Network World*) contain abundant information on the latest product developments and techniques being practiced, they are the best sources to meet this purpose.

Assignment

You may choose from the following topics:

- **Quality-of-Service (QoS) Issues in Wireless Networks**
- **Security Issues in Wireless Networks**
- **Ultra-Wideband (UWB) Technology**
- **Vehicular Networks (Car-to-Car or Car-to-Roadside Communication)**

You are expected to choose *at least* two articles that address one of these topics. The selected articles should contain sufficient information so that the reader can make a good judgment about the product/concept, know which techniques are used, etc. Each article should be read, understood, and related with concepts discussed in class.

Your assignment is to write a four-page report in your own words (*so, do not just reproduce sentences or paragraphs from the articles*). In this report, you should summarize what you have learned from the articles. Instead of providing a separate summary for each article that you have read, you should provide a single summary that integrates the concepts in all articles in a unified manner. Give a brief description of the problem the authors are trying to solve, the solutions offered, and a critique of the approaches. You must provide complete references to all referred articles (including URLs if the articles were found online). In addition to references to your main articles, provide references for any background information that you include and found somewhere other than the main articles.

Suggested Deadlines

Nov 3 – topic chosen, papers selected

Nov 10 – outline of paper

Nov 24 – first draft

Dec 8 – final paper

Format

- Four pages, double-spaced, 1-inch margins
- 12-point font (either Arial, Helvetica, or Times New Roman)
- Include section headings and subsection headings. You must include Introduction, Conclusion, References as well as other appropriate headings.
- Format for References Section:
Authors' names. Article Name. *Magazine Name*, vol. Volume, no. Number, (Month Year), pp. Pages.

Example:

Fall, K. and S. McCanne. You Don't Know Jack About Network Performance. *ACM Queue*, vol. 3, no. 4, (May 2005), pp. 54-59.

- Format for Citing Inside the Paper: (Authors' Last Names, Year)

Example: (Fall and McCanne, 2005)

Resources

The campus library (<http://www.lib.odu.edu/resources/ss/index.htm>) and the public libraries are good sources for the trade journals. Do not consider academic journals such as *IEEE Transactions on Communications*. The intent is to select articles dealing with practical issues or applications.

Here is a partial list of possible sources (it is not exhaustive):

- *Byte*
- *Computer World*
- *ACM Queue*
- *Datamation*
- *MacUser*
- *Media & Methods*
- *Network World*
- *Networking Management*
- *SmartNet*
- *PC Computing*
- *PC Magazine*
- *PC Week*
- *Technology Review*