

EE126 Research paper guidelines

Assigned November 19, 2014

Due: All materials are due **December 1, 2014**

Each of you have been assigned a topic. It is your mission to write a paper that accomplishes the following.

- For this assignment **mostly all of your references should be** IEEE/ACM/SPIE Journals and IEEE/ACM/SPIE conferences cited. You are allowed 4 wildcard references of your choice (NOT wikipedia!)
 - Endnote must be used for all your references.
 - Microsoft word docs are the only acceptable submission format.
 - Single column.
 - All images done in MS Visio
 - 11 point, times roman font, single spaced with 1 inch margins.
 - 8 pages minimum **not** including pictures, figures, diagrams or tables.
 - A PowerPoint set of slides to accompany your written document. Which you will present to the class. Your presentation should be 10 minutes.
 - Absolutely NO copying of any material is acceptable. You must put things in your own words and properly cite the authors.
- 1) Introduces the topic, its significance of importance to today's computing technologies at a level anyone can understand. This should also provide the necessary background and literature search on your topic. NO WIKEPEDIA.
 - 2) Provide a basic technical overview of the operation and or algorithms or schemes employed for your topic using nice visio diagrams, not spec sheets from the internet or the vendor! For instance, if you are doing a processor pipeline, be sure to talk about the stages of the pipeline and how stalls/forwarding works in the design.
 - 3) A comparison of methods and approaches to the topic you were assigned, including the benefits of one design over the other or the negatives of one thing over another. For those of you investigating counterfeiting, you would pick some of the toughest schemes to detect and discuss some of the research going on to address the issues. If you are doing networking, you would talk about what schemes are employed today, even if they are far more advanced than the basic ones you introduce in your introduction/background section
 - 4) The future trends or current issues researchers are working on. You can list many but need to elaborate on at least one topic.
 - 5) Conclusions. Discuss what you learned and what challenges lie ahead in the research topic field you were assigned.

6) References.

Bao, Long	dragonfly topology for networks (not the UAV)
Chen, Cody	congestion trees for flow control in communications
Cunningham, Sean	Virtual Machine usage in Cloud Computing for Amazon
Frizzell, Bradley	snoopy caches
Lee, Alice	content addressable memory
Meng, Xin	SISD Single Instruction Stream Single Data Stream
Nuzzolo, Michael	MIMD Multiple instructions streams Multiple Data Streams
Ren, Hui	SPMD Single program multiple Data Streams.
Rosenberg, Jacob	SIMD Single instruction stream multiple Data streams
Sun, Wei-Tse	the intel core i7 pipeline
Wang, Wei	the ARM cortex-A8 pipeline
Wilson, Cornell	power distribution and redistribution of workloads in cloud computing facilities
Wolf, Jonathan	counterfeiting schemes
Xue, Zhuting	Nvidia tesla gpu
Ye, Fanying	mutliprocessor network topologies
Youn, Clifford	counterfeiting and schemes to detect/prevent it
Yuan, Yaoshen	Virtual Machine usage in Cloud Computing for google
Zayan, Ahmed	fabric computing
Zhang, Bryan	self destructing circuits
Zhao, Minghuan	Memory testing methodologies

7) Judging

- a) Does the report read like you did it the night before?
- b) Do you have a sufficient number of RECENT references as well as fundamental ones? Minimum required references = 10
- c) Are the diagrams useful and labeled with useful captions?
- d) Did you choose 1 detailed example from your topic and discuss it in depth?
- e) Did you tell us more than just what we could read from the marketing spec or product manual ?
- f) How well did you utilize the references? Did you extract key concepts and discuss the merit/pros cons?
- g) How well did you extrapolate the current state of the art to the future?
- h) Is your conclusion just a cut and past of your introduction or did you actually summarize what you learned and what you think new directions will be?
- i) Did you actually proofread your paper?