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 wikipedial)
- 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 snopy 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 facilities
Wolf, Jonathan counterfeiting schemes
Xue, Zhuting Nvidia tesla gpu
Ye, Fanying multiprocessor 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?