EEL 6764 Principles of Computer Architecture
Term Paper Guidelines

The objective of the term paper is to develop the ability to read technical papers and the art of technical writing in computer architecture area. First, you select a broad topic from the list below. Next, you browse the field of the selected topic, and narrow down to 3-5 related papers that you would like to study for detail. Once you finish the study, summarize your understanding in writing.

You can work as a group of **up to two** members for this project. At the end, only submission is required for each group, and a single grade will be assigned to both members of a group.

Topics The list below includes topics within the interests of this course.

- Custom architectures for deep learning or other interesting application domains
- Reconfigurable computer architecture based on programmable logic
- Neuromorphic computing
- Quantum computing
- Emerging technologies
- Hardware Security in Embedded or General Purpose Processors
- Architectures for trustworthy and secure computing
- Latest advances in on-chip interconnect design

If you would like to select a topic that is not in the above list, **you must discuss your preferred topic with the instructor for approval before you start**.

Requirements of your paper

Timeliness The papers you choose for focused study should be recent, and published within the past three years.

References Other than the papers for focused study, you should include any other related references that are needed for understanding of your work. References must be formatted with complete bibliography information.

Length No more **four** pages including everything

Formatting Use the provided IEEE paper template.

Writing You have to write the term paper in your own words and appropriately cite works in the literature (do not miss the important ones). You should try to add your own worked out examples or traces of algorithm to explain them and draw your own figures and redraw the figures that you are using from a source and still refer to it. Term paper will be graded based on your own presentation, and **plagiarism is strictly prohibited**. Suggested topics are, but not limited to: Using examples with sufficient explanations is often a good idea to help readers understand what you try to present.

Structure Your paper must include the following components

- Problem statement & Motivation
- Background
- Approaches to problem solutions
- Evaluation and Analysis
- Conclusion and future work
- References

Evaluation:

- Format − Must use the required format
- Organization
- Presentation − clarity, adequacy, appropriate citations of references

Before submission, you must proofread your paper and make sure to eliminate all possible typos and other writing/style issues.

Due date Wednesday, November 21st, 2018 (strict deadline).

Sources of references The following list include some places where you can browse to search for the papers for your focused study.

- IEEE Computer, Micro, Proceedings of IEEE
- IEEE Transactions on Computers,
- IEEE Spectrum,
- IEEE Trans. on VLSI Systems, Circuits and Systems,
- Computing Surveys,
- Computing Reviews,
- Communications of the ACM,
- Proceedings of International Symposium on Computer Architecture (ISCA),
- Proceedings of International Conference on Parallel Processing (ICPP),
- Proceedings of International Conference on Computer Design (ICCD),
- International Symposium on Field-Programmable Gate Arrays (FPGA)
- Other conderences: HALO, DAC, HOST, MICRO
- Any other related conference proceedings, journals and research monographs.

Additionally, *IEEE Xplore* and *Google Scholar* are very useful tools to find papers referenced or referencing papers.

Academic Honesty and Integrity

Any kind of plagiarism in the term paper will result in a "FF" in term paper and the course! So make sure the paper is written in your own words. Copy other papers verbatim is an obvious form of plagiarism. If diagrams need to be borrowed from other papers, make sure in your paper that the original sources of those diagrams are clearly referenced.