ECE 585 – Computer Organization & Design

Research Project
Due Date: Sunday, December 4th 2022, 11:59PM

IMPORTANT:	In the cover page of **ALL YOUR ASSIGNMENTS**, it is required that you acknowledge that you did not get any assistance from anyone and/or any other sources, and/or copying from the Internet for completing your assignments. **You must sign and date *below acknowledgment*. Failing to do so, or any violation of this rule will result in an automatic failure for this course.**
Acknowledgment:	I acknowledge all works including figures, codes and writings belong to me and/or persons who are referenced. I understand if any similarity in the code, comments, customized program behavior, report writings and/or figures are found, both the helper (original work) and the requestor (duplicated/modified work) will be called for academic disciplinary action.

Select a research topic in Computer Architecture. You may choose from the list below, or you may define your own research topic. **Pick a minimum of three relevant research papers** from recent literature published after Year 2010 (e.g., ACM database, IEEE Xplore database, Google Scholar database). You are required to critically review the content of selected papers by exploring their objectives, description of problem statements, methodologies for solving given problems, results presented in the paper along with your own thoughts and opinions.

It is required to submit a **pdf** report to **the Blackboard**, with a minimum of **2,500 words** (Times New Roman, Size 10-12, Single Spaced) plus any number of figures or tables.

The reports should include the following sections:

1. Abstract of your report
2. Introduction
3. Description of problem statements addressed in selected paper/topic
4. Methods used, introduced in the selected paper/topic
5. Results presented in the paper
6. Discussion (your opinion) of the selected paper/topic
7. Conclusion
8. Future recommendation (your opinion)
9. References

Suggested Research Topics

1. Novel Computer Architecture for High Performance
2. Cloud Computing Architectures
3. Deep/Machine Learning and Computer Architectures
4. Neural Network Supporting Computer Architectures
5. Power-efficient Computer Architectures
6. Heterogeneous System Architecture
7. Quantum Computing and New Computing Systems