Trent University

COIS 2300H

Assignment #1

Due: October 9th, 2015

You are to research a computer organization/computer **architecture** topic and present your findings in a research paper. You should read various reference materials to gather information, which then should be presented in a logically organized and coherent paper. You should read at least 3 or 4 distinct reference sources and list them at the end of your paper. Online references are fine if there are from a reputable source (i.e. you cannot use Wikipedia).

Some possible subject areas are:

- CPU Chips: Compare/contrast different manufacturer offerings
- GPUs: Performance, computational speed versus memory speed
- Video surveillance environments (bandwidth, resolution, recording storage)
- Storage Medium (SSD, Various DVD technologies, High density disks, Disk arrays)
- Computer Systems (PCs, Mainframes, Mobile, Massively parallel computers)
- HPC Clusters (SharcNet, Google, Wikipedia's server farm)
- Buses, I/O systems, caches, RAM, etc. (USB3, Firewire)
- Networks: Home routers, The WWW, search engines

Or anything else you can think of that's **hardware** related. The possibilities are limitless. Your paper must focus on the performance of the subject hardware. An analysis of the configuration and technical specifications and how those decisions affect performance.

You should choose something that you are interested in as a subject. Your paper should be about 4-5 pages long (1200 words) and include a bibliography (you do not need to worry about footnotes). Your subject should be unique within the class. You are expected to do individualised work.

Submissions will be done through Blackboard.

Please be aware of the rules regarding plagiarism. If you aren't sure if what you are doing consists of plagiarism, please contact me before you submit the paper. If you have copied someone else's work (including cutting and pasting from the Internet), you will receive a zero on this assignment and the department chair and dean will be notified of the infraction.