CS551/ECE541 - Advanced Computer Architecture
List of possible term projects

- Utilize the “cache size” program to guess the memory parameters of a system (your laptop or other computer). A revised program that is probably easier to compile is available from the instructor
- DSP Architectures
- Evolution of the ARM/x86 architecture
- Cellphone architectures
- Embedded system processors
- Multimedia Instruction Sets
- “Game Box” architectures
- Hypertransport(AMD)/QPI(Intel) interconnect buses

Some Rules of the Game

Please consult the instructor concerning deliverables. If the deliverable is a paper, the format of the paper should be one of the “standard” research formats, such as the IEEE or ACM journal formats. While the number of pages is not a good measure of the quality of the paper, nonetheless everyone asks the question about how long the paper should be. As a rough estimate, the paper should be 6-10 pages. Also, you must include references - a minimum of five references are required. The majority of references should be “academic” references - papers that have been submitted to professional conferences or journals, and not advertising hype as developed by vendors. Industry “white papers” might be acceptable as references, but cannot be the majority of the references. Research projects should be individual rather than team efforts, unless approved by the instructor.

Once you make your decision on a topic, please let your instructor know your choice.