CSE425 TERM PROJECT

- Embedded projects (Microblaze & Xilinx XPS/EDK/SDK)

- Breakout Game
  - In this game, left wall is replaced by several layers of bricks. When a ball hits a brick, the ball bounces back and brick disappears.
  - Design & implement on FPGA. Display it on PC monitor thru VGA port of Spartan. User inputs go thru PS/2 Keyboard interface.

- Frequency Analyzer (you will need a signal generator for the input or design your signal generator circuit) to display the frequency of the signal’s frequency on seven segment display of Spartan.

- Mouse Pointer Circuit
  - Mouse pointer circuit uses a mouse to control the movement of a figure on the screen. User creates the figure by drawing with the mouse. Design & implement on FPGA.

- SRAM Tester Software
  - Test, write and read block SRAM and external RAMs thru RS232 of Spartan interface.

- Font Display Circuit
  - Treat characters as tiles and design the pixel generation circuit. Design & implement on FPGA. Display it on PC monitor thru VGA port of Spartan. User inputs go thru PS/2 Keyboard interface.