Graduation Projects 2010-2011
Prof. Yasser Mostafa Kadah

Project 1

Real-Time Embedded Digital Signal Processing IP on FPGA

Applications
1. Logic analyzer (applications in digital design of ultrasound imaging systems)
2. RF signal sampling (applications in Doppler ultrasound signal processing)
3. ECG/EEG signal processing

Project 2

Embedded A-mode Ultrasound Imaging System

Applications
1. Ultrasound analog front-end design and implementation
2. High-speed data acquisition into an embedded system
3. Data processing and display on embedded system

Project 3

Parallel Computation Toolbox for PC-Based Medical Image Reconstruction

Applications
1. Ultrasound image reconstruction
2. MRI image reconstruction
3. 3D Volume reconstruction
4. CT image reconstruction

General Rules

1. Each project is done by one group of up to 4 students.

2. Selection of students for the different projects will be done by the Medical Equipment I & II class grades then by cumulative 3rd year grade average of the group.

3. Application to join should be sent to my e-mail during the first week of school. Please send all the information regarding your grades along with your list of projects in the order of your preference.