A.A. 2012/2013
Multimedia
Possible final projects

Smart Cities (in collaboration with Techlab Works)

1. Lane Traffic Counts classifying direction and vehicle classes (Car, Truck);
2. Parking violations and Illegal Parking detection;
3. Parking Duration check;
4. Automatic license-plate recognition ALPR;
5. Plate Pattern Matching in standard Surveillance Camera;
6. Car Pattern Matching in standard Surveillance Camera for vehicle tracking;
7. Visualization portal;
8. Realtime Traffic Analysis;
9. Traffic Statistical Reports;
10. City traffic Heat Map;
11. Illegal Dump detection;
12. Development of a single channel Linux/Android based embedded;
13. NVR able to detect illegal dump phenomena.

Integrated Control of Surgical Environments (in collaboration with Techlab Works)

14. H.264 CUDA Encoder DirectShow Filter
15. Improving live multimedia pipeline performance
16. DirectShow Network Streaming filter for TCP,RTSP,HTTP transmission
17. Latency optimization in current streaming framework
18. Picture in Picture DirectShow Filter
19. Touchless enabled DICOM viewer trough Kinect like devices
20. Voice recognition to query patient data
21. Gesture recognition for touchless control of DICOM viewer

Kinect based projects

22. Develop a framework for image processing applications based on Kinect + OpenCV API;
23. Shelves emptying detection;
24. Depth filtering based applications;

Android based projects

25. Augmented Reality applications
26. Smart Camera applications
27. Image editing framework

You can also propose a new project that is not in this list ;)
Please communicate your choice to: Prof. Sebastiano Battiato (battiato@dmi.unict.it) or Dr. Marco Moltisanti (moltisanti@dmi.unict.it)