**Project Description and Team Members**

Computer Engineering 185 – Fall 2013

Professor Dahlquist, Section 01 Discussion

**Project Name:** Smart Park

**Team Members:** Jayson Francis, Karim Zahriya

**Project Description:** This project will be a simulation concept design of a parking garage at our university. Smart park system will consist of a LCD display at the entrance of the garage, which will display the current capacity in real time. We will be using sensors at the entrance that will send signals to our microcontroller (we will be using the Arduino Uno) that also be operating a gate, that will be operated by a servo. Every time motion is detected at the entrance, a pulse will be sent to make the servo move to a 90-degree angle, opening the entrance for the gate.

We will have multiple sensors at specific parking spots inside the garage. When these sensors are “high”, it will inform our microcontroller, and our program will then recalculate the available capacity in the garage and will update our LCD display.

Our long-term goal for this project will be to make the Arduino communicate data through the Internet using a Wi-Fi Shield, updating information on a SQL database. We will develop both Android and iOS applications to be able to communicate with the SQL database. The applications will then display the same information the LCD display will contain at the garage, but be able to do remotely through the internet, making it easier for students to be updated on current traffic and congestion statuses in real time.