**ABSTRACT**

The goal of the project is to create an automated gas control system that uses a servo engine to control the regulator knob of the LPG. The system includes a microcontroller and servo motor as well as gas leakage sensor and rotating switch. The servo motor is mechanically connected with the regulator knob. This allows for precise control over the positioning of the motor. For example, the motor can be set to 140 degrees for the off position or 0 degrees for the on position. This eliminates the possibility of accidents due to forgetting to turn the regulator knob off after cooking, which is a common problem with manual systems. A gas leakage sensor warns users of potential leaks. If the sensor detects a leak, the servo engine will shut down the gas supply if it detects the leak. The rotating switch, which mimics a stove knob, tells the microcontroller what the stove’s status is. In future improvements, a pressure monitor will be added to track the daily gas consumption and will be shown on the LCD screen for the user’s awareness. Our goal is to reduce gas related accidents and promote efficient LPG consumption.