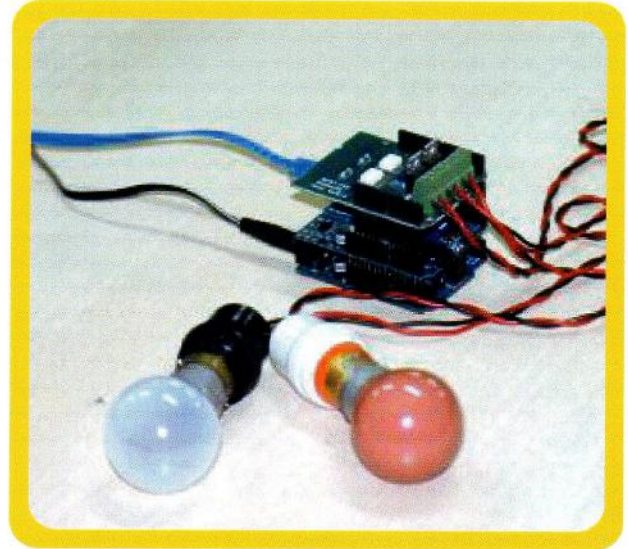## Internet based Appliance Control

Features

- Appliance control with commands sent from an Internet browser acting as a HTTP client

- Ethernet enabled Arduino platform acts as HTTP server, receives the command, parses it and performs control action

- Ethernet server/client concept at work

Hardware

- Arduino UNO board based on the 8-bit ATmega328 microcontroller working at 16 MHZ

- Ethernet capability is added by using Sparkfun's Ethernet shield

- Ethernet chip with TCP/IP stack on the shield is WIZ5100

- Appliance control using GRIET's Triac shield

- Interface between microcontroller andEthernet shield :
  * Serial Peripheral Interface(SPI)

Firmware

- Based on the Arduino programming language

- Uses the Ethernet library which provides functions for setting IP address, MAC address and port address, providing Ethernet server/client classes, knowing client connection status and reading client sent by client

- The Ethernet library uses the SPI library of Arduino- SPI.h