

Sr. No.	Project Title	Technology	
1	FTP Server	C and Socket Programming	Implementation of FTP server which can support all possible FTP client like telnet,linux FTP client.It handle multiple clients simultaneously connected over TCP socket
2	Home Automation	IoT	This project is divided into two parts i.e. Python server program on Beagle Bone Black ARM board and Android Phone client application. The WiFi dongle is connected to the BBB and TCP sockets are used to establish communication channel. The Android App provides the ON/OFF control for the various appliances. The appliances are interfaced to the BBB through the set of relays. The appliances includes DC motor and lamps.
3	Industrial Data logger	IoT	
4	Industrial Automation	IoT	
5	Smart Parking Assistance	IoT	I built this project to monitor the slots for the cars i.e anyone who want to park the car they can able to park the car very easily with the help of this project in the specific parking area.I made this project with the use of beaglebone black microcontroller interfacing with the infrared sensor.
6	Smart City	IoT	
7	Whether Brocasting	IoT	This project monitors weather parameters. We are using beaglebone black ARM board with DHT22 temperature sensor. The Python program is implemented using Cloud9 IDE to sense temperature and humidity send it to the server using REST protocol using HTTP POST method. The server has been implemented as java servlets that accept the data in JSON format and store it into MySQL database using SQL queries display as HTML table.
8	Green House monitoring system	IoT	
9	Linux Block Device Driver and Putting File System On RAM	Linux Device Driver	The main aim of this project is to use RAM as a disk by putting a file system on it, so that data can be accessed through file names rather than through memory address. I am accessing RAM of a PCI card. The PCI driver probes the card and get its memory addresses. For testing, this block device is formatted with EXT2 and partitioned to read write files.
10	Communication between Android Phone And ARM Microcontroller Using Bluetooth	Microcontroller	This project is mainly based on mobile communication with Micro controller via Bluetooth and controlling the device using mobile. we are using the Android mobile to communicate with the LPC1768 micro controller. An android application based mobile is connected to system through Bluetooth Device, which is attached to the micro controller using serial port communication i.e UART.
11	Data Acquisition System	Microcontroller + RTOS	The project is based on taking the ADC values on real time basis through FreeRTOS ported in LPC1768 board. The ADC values are then trasmitted to computer via UART. Xenomai framework has been ported to the computer to take the data. The data is then sent to user space via pipe. Finally the pipe is read by GTK which plots the ADC values on the graph.
12	Vehicle Automation using CAN Protocol	Microcontroller	
13	Audio Player	Microcontroller	
14	MQTT based Monitoring System for Coal Mine Using Raspberry Pi	IoT	
15	Agriculture monitoring system Using IoT	IoT	
17	IoT Based GAS and smoke detection	IoT	
18	Smart water distribution system for a city	IoT	

19	Smart Home using IoT	IoT	This project is divided into two parts i.e. Python server program on Beagle Bone Black ARM board and Android Phone client application. The WiFi dongle is connected to the BBB and TCP sockets are used to establish communication channel. The Android App provides the ON/OFF control for the various appliances. The appliances are interfaced to the BBB through the set of relays. The appliances include DC motor and lamps.
20	Bluetooth File Transfer Between BeagleBone Black And Android Phone	Embedded OS	This project transfers data or file between Android phone and Beaglebone Black ARM board using Bluetooth. The BBB is connected to a Bluetooth dongle. The bluez stack 4.99 is installed on BBB to perform bluetooth operations. The android phone is a client device that sends or receives file from the server. The device has been paired with android phone.
21	CAN and IoT Implementation for vehicle safety.	Microcontroller	This project implements CAN to facilitate a robust, flexible, low power and a real time system. ARM Cortex M3 and Arduino is used to work as CAN nodes. Rain Water Sensor is used to detect water drops which controls Servo and temperature sensor LM35 to measure temperature which further controls the cooling system. NodeMCU is used to send this data over InternetThings.io with the help of REST protocol.
22	CAN based collision avoidance system	Microcontroller	Collision avoidance system consists of ultrasonic sensor, AVR micro controller ATMEGA32, CAN controller and CAN bus. The ultrasonic sensor is used to measure distance between vehicle and obstacle. CAN controller is used to send data from one node to other node. The sensor detects obstacle in certain range and this data is sent and driver gets information about the obstacle or not.
23	Vehicle Automation System using CAN Protocol	Microcontroller	This project uses Arduino Uno microcontroller which is based on AVR ATmega328P for monitoring engine temperature LM35 and smoke gas leakage detection MQ2 Gas Sensor. This project consists of two nodes connected through MCP2515 CAN Bus Module. At transmitter node sensors are connected to measure vehicle parameters and these values are displayed on LCD on receiving node Dashboard.
24	IoT Based Garbage monitoring System	IoT	This project is monitoring the garbage level using HCSR04 ultrasonic sensor. The ESP8266 is used to interface HCSR04. C program to get the distance data from the sensor. If distance value is modified by some threshold value, then data is updated to server side in JSON format. The server is implemented on Beaglebone black, which dumps this data into MySQL database and also fetches updated data to the android app.
25	Integrated system for regional monitoring and data logging with GUI using Qt framework	IoT	The system integrates a GUI that can be deployed on a monitor, for online update of data and events from system. The system employs different range of sensors for monitoring purposes. For instance environmental monitoring is contributed by humidity, temperature and atmospheric pressure sensor. System also provides a web interface incorporating global connectivity and remote access.
26	Relative Positioning System	Microcontroller	
27	Vehicle Speed Monitoring System	Microcontroller	
28	Remote monitoring and controlling real time industrial parameters	IoT	
29	Intelligent driver alert system CAN	Microcontroller	
30	GPIO Based LCD Device Driver on Beagle Bone Black	Linux Device Driver	
31	I2C Based EEPROM Device Driver on Beagle Bone Black	Linux Device Driver	

32	IoT Based Noise And Air Pollution Monitoring System	IoT	To monitor the pollution level of particular area, through the server.
33	Door control from Android phone using Bluetooth	Microcontroller	Project is divided into two parts i.e. Android application and Firmware of ARM CortexM3 LPC1768 blueboard. The android application must input a password and then on off control is available. The firmware validate the password received from the Android phone using the bluetooth module HC05 and acknowledge the Android phone. The Device connected to blueboard is used to control opening and closing of the gate door.
34	RFID based Attendance System	Microcontroller and IOT	
35	General Secured System -GeSS_CAN	Micro-Controller	
36	CAN & Microcontroller Inteligent driver alert system	Microcontroller	
37	Smart Blind Stick Using Stm32 & Sensors	Microcontroller	
38	Linux Device Driver for Keyboard	Linux Device Driver	
39	I2C Based accelerometer device driver using beaglebone black	Linux Device Driver	
40	Industrial Data Logger	IoT	
41	Audio Player using I2C and SPI protocols	Microcontroller	
42	Interfacing using CAN for home automation	Microcontroller	
43	Vehicle Speed Monitoring System using UART	Micro-Controller	
44	Remote Monitoring Unit For Industry	RTOS and IOT	
45	IOT Based Noise and Air Pollution Monitoring System	IOT	
46	SMART HOME USING IOT.	IOT	
47	Password based door locked system using stm32	Microcontroller	
48	Dashboard Designing Using CAN Protocol	Microcontroller	
49	Vehicle Automation System using CAN protocol	Microcontroller	
50	Vehicle safety using IOT	IOT	
51	CAN based collision avoidance system	Microcontroller	
52	Bluetooth file transfer between beagle-bone black and android phone	Embedded OS	
53	Audio Player using STM32 with touchscreen interfacing	Microcontroller	
54	GPIO Based LCD Device Driver on Beagle Bone Black	Linux Device Driver	
55	Data Acquisition System	Microcontroller & RTOS	
56	Green House Monitoring System	IOT	
57	Health Care device	IOT & Microcontroller	
58	I2C based EEPROM Device Driver on BeagleBone Black	Linux Device Driver	
59	USB Device Driver	Microcontroller	
60	Vehicle speed control and Accident avoidance System using CAN	Microcontroller	
61	Pollution monitoring system	IOT & Microcontroller	
62	Home automation system	IOT & Microcontroller	
63	Vehicle location tracking using SPI protocol	Microcontroller	
64	Data accession by using RTOS and CAN	Microcontroller & RTOS	
65	Automatic breaking system	IOT & Microcontroller	