# M.Tech Projects List for Embedded Systems IEEE 2014-2015

(ARM9/ARM11/LPC2148/Cortex/Android/Linux/MSP430/PIC/Arduino/ATMEL/ATMEGA)

1. Android and Raspberry Pi based Home Automation (WiFi / Bluetooth).
2. An emergency rescue dispatch system for road vehicles for instant notification of road accidents and post-crash analysis (IEEE May, 2014)
3. Design and development of android mobile based bus tracking system (IEEE Aug, 2014)
4. Mobile enabled bus tracking and ticketing system (IEEE - 2014)
5. GPS based real time Emergency Aid System with analysis of latency in satellite communication (IEEE May, 2014)
6. Vehicle location finder using Global position system and Global System for Mobile ((IEEE Aug 2014)
7. Real time metropolitan bus positioning system design using GPS and GSM (IEEE-2014)
8. ARM11 based RFID access control system with Live Image Capture (SOOXMA-2015)
9. Optical Flow Motion Detection on Raspberry Pi (IEEE-2014)
10. The design and implementation of circuit breaker on-line monitoring device (IEEE - 2014)
11. Raspberry Pi based interactive home automation system through E-mail (IEEE-2014)
12. Design of a solar tracking system for renewable energy (IEEE-2014)
13. Raspberry Pi as a Wireless Sensor node: Performances and constraints (IEEE-2014)
14. ARM Based Implementation of Text-to-Speech (TTS) for Real Time Embedded System (IEEE - 2014)
15. A plug-n-play internet enabled platform for real time image processing (IEEE-2014)
16. Real Time Operating System on embedded Linux with ultrasonic sensor for mobile robot (IEEE - 2014)
17. Smart home automation system for energy efficient housing (IEEE - 2014)
18. Liquid level control of Coca-Cola bottles using an automated system (IEEE - 2014)
19. Design of tracked robot with remote control for surveillance (IEEE-2014)
20. Design of Greenhouse Temperature Detection System Based on Linear Offset Interference (IEEE - 2014)
21. An enhanced fall detection system for elderly person monitoring using consumer home networks (IEEE - 2014)
22. Design of a RFID-based speed monitoring system for road vehicles in Brunei Darussalam (IEEE-2014)

23. Design and implementation of a low-cost embedded Linux gateway for smart home health monitoring (IEEE 2014)
24. Face identification implementation in a standalone embedded system (IEEE - 2014)
25. Android based smart home system with control via Bluetooth and internet connectivity (IEEE - 2014)
26. Automated electric meter reading and monitoring system using ZigBee-integrated raspberry Pi single board computer via Modbus (IEEE - 2014)
27. Using of Raspberry Pi for data acquisition from biochemical analyzers (IEEE 2013)
28. Bluetooth communication using a touchscreen interface with the Raspberry Pi (IEEE-2013)
29. Development of Fire alarm system using Raspberry Pi and Arduino Uno (IEEE - 2013)
30. Full Software Radio transceivers (IEEE - 2013)
31. Location-Aware and Safer Cards: Enhancing RFID Security and Privacy via Location Sensing (IEEE - 2013)
32. RasPi based liquid flow monitoring and control system
33. Solar powered Raspberry Pi for automation.
34. Video surveillance based on Linux Embedded Minicomputer.
35. PIR Sensor triggered image capturing system.
36. Embedded Linux based door access control system.
37. GPS data logger using Linux single board computer
38. MMA7660 I2C based MEMS Accelerometer Controlled Robot based on ARM11.
39. Wireless powered raspberry Pi.
40. Number plate recognition and automatic gate opening system using Raspberry Pi
41. Image processing based Vehicle Number plate recognition and alerting system.
42. Raspberry Pi and WiFi based Industrial Automation.
43. Embedded Linux based DC Motor Control System
44. Robotic arm design using embedded Linux (Linux RTOS)
45. Wireless control of Robot with video surveillance (Embedded Linux)
46. RFID interfacing with Raspberry Pi (Embedded Linux)
47. GSM Modem based automation using Realtime embedded OS.
48. Autonomous Robot using Embedded ARM based Linux OS.
49. Android Smart and Raspberry Pi interfacing over advanced WiFi Protocol.
50. Android Smart and Raspberry Pi interfacing over Bluetooth Serial Protocol.
51. Student attendance monitoring and access control using Embedded Linux OS based single board computer.
52. Beagle Bone (Black) based Home automation.
53. Beagle Board based Robot control.

54. Multitasking Hardware control using embedded Linux.
55. Embedded Linux based Energy Meter.
56. Video surveillance based on Linux Embedded Mini computer.
57. PIR Sensor triggered image capturing system.
58. Embedded Linux based door access control system.
59. Construction of WiFi Printer.
60. Android driven smart thermal printer.
61. GPS data logger using Linux single board computer.
62. Raspberry Pi based Text to Speech assistant for blind.
63. Raspberry Pi (ARM11) based speaking distance meter for blind and engineering measurements.
64. Design and construction of Raspi based weather announcement system of FM radio transmission.
65. Raspi based Automatic Traffic signal status announcement system over FM transmitter. Useful in foggy/snow weather conditions.
66. Raspberry/beagle bone based audio/visual calling bell.
67. Beagle bone black based ANPR (Automatic Number Plate Recognition ) System.
68. Motion activated alarm that sends intruder image as email attachment.
69. IoT (Internet of Things) based home automation using Raspberry Pi/Beaglebone Black.
70. Wireless Mouse Controlled Raspberry Pi Robot.
71. Wireless Mouse operated Robotic arm with 4 degrees of freedom.
72. Raspberry Pi single board computer for Smart City applications.
73. Realtime GPRS irrigation monitoring using Raspberry Pi.
74. Use of ultrasonic coding signals and PIR Sensor.
75. ARM-11 based smart car security.
76. Design and Implementation of MCU and the internet Communication system based on GPRS.
77. Embedded LINUX based Android application using voice controlled commands for scrolling display with multiplexed LED array.
78. Embedded Linux based Human vehicle interface using Wireless Wi-Fi Communication.
79. Integrating Off-Board Cameras and Vehicle On-Board Localization for Pedestrian Safety.
80. Optical Wireless for Intra vehicle Communications:
    A Channel Viability Analysis.
81. Bluetooth based advanced wireless home automation system.
82. Wireless Power Transmission with Self-Regulated Output Voltage for Biomedical Implant.
83. Wireless Sensor Network for Multi-Story Building Design and Implementation.