

## **M-Tech IEEE (2015-2014) Projects**

**(Intel Galileo, Beaglebone Black, ARM11 (Raspberry Pi/ Banana Pi processor),  
ARM Cortex A9, MSP430 launchpad, ARM7)**

**HVS-900.** Minimum-Time Trajectory Planning and Control of a Pick-and-Place Five-Bar Parallel Robot **(IEEE-2015)**

**HVS-901.** Autonomous Pose Detection and Alignment of Suction Modules of a Biped Wall-Climbing Robot. **(IEEE-2015)**

**HVS-902.** Design of a Direct-Driven Linear Actuator for a High-Speed Quadruped Robot, Cheetaroid-I. **(IEEE-2015)**

**HVS-903.** Manipulator Design and Operation of a Six-Degree-of-Freedom Handheld Tremor-Canceling Microsurgical Instrument. **(IEEE-2015)**

**HVS-904.** Cooperative Path Planning for Target Tracking in Urban Environments Using Unmanned Air and Ground Vehicles. **(IEEE-2015)**

**HVS-905.** Vehicle Color Classification Under Different Lighting Conditions Through Color Correction. **(IEEE-2015)**

**HVS-906.** A Low-Power Wireless Sensor for Online Ambient Monitoring. **(IEEE-2015)**

**HVS-907.** Implementing Intelligent Traffic Control System for Congestion Control, Ambulance Clearance, and Stolen Vehicle Detection. **(IEEE-2015)**

**HVS-909.** Improved Ultrasonic Phased Array Based on Encoded Transmissions for Obstacle Detection. **(IEEE-2015)**

**HVS-910.** A Zigbee-Based Animal Health Monitoring System. **(IEEE-2015)**

**HVS-911.** WSN-Based Smart Sensors and Actuator for Power Management in Intelligent Buildings. **(IEEE-2015)**

**HVS-912.** Long-Range Magnetic Tracking System. **(IEEE-2015)**

**HVS-913.** A Phase-Based Technique for Localization of UHF-RFID Tags Moving on a Conveyor Belt: Performance Analysis and Test-Case Measurements. **(IEEE-2015)**

**HVS-920.** Embedded Linux based Finger print security access control system using Raspberry Pi/ Banana Pi processor.

**HVS-933.** Raspberry pi based liquid flow monitoring and control. **(IEEE-2014)**

**HVS-751.** Bluetooth communication using a touchscreen interface with the Raspberry Pi. **(IEEE-2014)**

**HVS-750.** Low-Cost Speaker and Language Recognition Systems Running on a Raspberry Pi. **(IEEE-2014)**

**HVS-749.** Automated electric meter reading and monitoring system using ZigBee-integrated raspberry Pi single board computer via Modbus. **(IEEE-2014)**

**HVS-748.** Raspberry Pi as a Wireless Sensor node: Performances and constraints. **(IEEE-2014)**

**HVS-747.** Raspberry Pi based interactive home automation system through E-mail. **(IEEE-2014)**

**HVS-752.** Secure sensor node with Raspberry Pi. **(IEEE-2014)**

**HVS-753.** Control system for video advertising based on Raspberry Pi. **(IEEE-2014)**

**HVS-754.** Using of Raspberry Pi for data acquisition from biochemical analyzers. **(IEEE-2014)**

**HVS-924.** Browser based device control using Raspberry Pi/ Banana Pi processor.

**HVS-806.** Solar powered Intel® Galileo microcontroller board.

**HVS-796.** Cubie truck Cubieboard3 Cortex-A7 Dual-Core interfaced RFID for tollgate control system.

**HVS-798.** MSP430 mixed-signal microcontroller based locker security system with auto alerting and punishing system

**HVS-802.** Cubie truck Cubieboard3 Cortex-A7 based Power management system in shopping malls

**HVS-800.** Design of an embedded platform using Texas Instruments MSP430 based GPS based border alert system for fishermen

**HVS-801.** A design of Highly sensitive Alcohol sensor with auto car ignition disable feature using Radxa rock - arm cortex a9

**HVS-794.** Design and implementation of car driving MSP430 mixed-signal microcontroller based versatile robot car system for physically handicapped

**HVS-797.** An New WBDUAL (Wand Board Dual) ARM i.MX6 Cortex-A9 based Cell Phone for Remote Controlled Embedded System for Irrigation

**HVS-795.** Design of WBDUAL (Wand Board Dual) ARM i.MX6 Cortex-A9 Dual Core based wireless controlling of powered devices using android smart phones with Wi-Fi.

**HVS-804.** WBDUAL (Wand Board Dual) ARM Cortex-A9 Dual Core Processor Development Board with WiFi accessing for security controls implementation.

**HVS-816.** Development of a tilt measurement system based on MEMS sensor and Cortex-M3

**HVS-818.** Driver design and implementation of CAN BUS in real-time operating system based on ARM Cortex-M3

**HVS-803.** A new embedded design based Missile detection and auto destroy system using Banana Pi processor

**HVS-805.** Wireless Power Transmission with Self-Regulated Output Voltage for Cubieboard3

**HVS-807.** Design of pre-verifying Serial-Ethernet communication gateway based on LM3S8962

**HVS-820.** Implementation of arm embedded web server for DAS using raspberry pi

**HVS-926.** Web remote controlled robot cam using WebIOPi Framework with Raspberry Pi/ Banana Pi processor.

**HVS-925.** Raspberry Pi/ Banana Pi processor based Remote Surveillance System using Embedded LINUX, WebCam

**HVS-927.** Development of embedded Web Server on Raspberry Pi/ Banana Pi processor.

**HVS-928.** Home Monitoring System with Motion Detection and Email Alerts using Raspberry Pi/ Banana Pi processor.

**HVS-929.** Design of the Remote Data Monitoring and recording system based on Raspberry Pi/ Banana Pi processor.

**HVS-823.** Exploiting Multiple Wireless Interfaces in Smart phones for Traffic Offloading using Raspberry Pi/ Banana Pi processor mini computer

**HVS-828.** Design of new Embedded speaking Robot for Older adult's medication management in the home using Linux single board computer Raspberry Pi/ Banana Pi Processor

**HVS-930.** Home Automation using Raspberry Pi/ Banana Pi processor (ARM11) with Capacitive Touch Screen

**HVS-824.** Array Designs for Long-Distance Wireless Power Transmission: State-of-the-Art and Innovative Solutions for self powered Raspberry Pi/ Banana Pi processor

**HVS-799.** Embedded Linux based Automatic Door opening and Room Illumination Control system using sensors and minicomputer Banana Pi processor

**HVS-822.** Embedded Linux based Hardware Implementation of Ground Classification for a Walking Robot using Raspberry Pi/Banana Pi processor.

**HVS-830.** HRI-2013 Workshop on Probabilistic Approaches for Robot Control in Human-Robot Interaction (PARC-HRI) using Raspberry Pi/ Banana Pi processor

**HVS-827.** Embedded Platform usage for Physical computing and Android in Robotics using Mini computer Raspberry Pi/ Banana Pi processor

**HVS-829.** Embedded Linux based an Investigating the Accuracy of Mobile Urban Sensing with Raspberry Pi/ Banana Pi processor and GSM technology

**HVS-764.** Airplay Mirroring on Raspberry Pi

**HVS-765.** TRANSFERRING images from Raspberry PI to Windows GUI

**HVS-766.** Raspberry Pi based fire detection based on image processing and alerting system.

**HVS-767.** Wi-Fi based Raspberry Pi home.

**HVS-768.** Wireless sensor network for real-time air pollution monitoring using Raspberry Pi.

**HVS-769.** Wireless Machine-to-Machine Healthcare Solution Using Android Mobile Devices in Global Networks using Raspberry Pi.

**HVS-772.** Full-duplex communication by live video streaming to detect the fire based on image processing and continues robot Implementation using Raspberry Pi.

**HVS-780.** Pi Concealed Alarm using Raspberry Pi.

**HVS-771.** Sensor based Gear Position Identification System based on Raspberry Pi.

**HVS-779.** Raspberry Pi based domesticated robot.

**HVS-776.** Human Heart beat signal and Temperature analysis using MATLAB.

**HVS-770.** Raspberry Pi based Disaster Security Robot

**HVS-775.** Pi-Robot implementation using Raspberry Pi controlling through MATLAB.

**HVS-778.** Defibrillator developing using Raspberry

[www.hvstechnologies.in](http://www.hvstechnologies.in)

Ph: +91 9603140482

**Ameerpet:** #A-7, 2<sup>nd</sup> floor, Eureka court, Above KS bakers, Ameerpet, Hyderabad – 73.

**Miyapur 'X' Roads:** #201, Meher Plaza, Miyapur 'X' Roads, Hyderabad - 49.

**Dilsukhnagar:** #F-8, 1st floor, Sreemaan Rama Towers, Opp:Kalanikethan, Chaitanyapuri, Hyderabad - 62.

- HVS-773.** Design and implementation of a GPRS remote data logger for weather forecasting using Raspberry Pi.
- HVS-777.** Object sorting implementation using Raspberry Pi.
- HVS-774.** Raspberry Pi based SCADA System.
- HVS-882.** Embedded design of location based car music player control system with Raspberry Pi/ Banana Pi processor.
- HVS-865.** Design of an ARM-11 core Raspberry Pi/ Banana Pi processor based Practical Human-Powered Contact less Charger for Cell phone
- HVS-886.** A New method of a Button based nurse or attender calling system using Real-time embedded OS Raspberry Pi/ Banana Pi
- HVS-887.** ARM-11 Raspberry Pi/ Banana Pi Processor Based Smart Car Security for Theft control and Accident Notification.
- HVS-888.** An Embedded Linux Raspberry Pi/ Banana Pi based Integrating Off-Board Cameras and Vehicle On-Board Localization for Pedestrian Safety.
- HVS-889.** An Optical Wireless Intra vehicular communication using Real-time embedded OS Raspberry Pi / Banana Pi processor.
- HVS-890.** Location-Aware and Safer Cards: Enhancing RFID Security and Privacy via Location Sensing using Raspberry Pi/ Banana Pi.
- HVS-891.** Fabrication of Robot using Raspberry Pi/ Banana Pi with Android Wi-Fi controlled for human and fire detection alerts
- HVS-892.** Embedded LINUX Raspberry Pi/ Banana Pi and Android based voice controlled notice board with Scrolling LED display
- HVS-876.** Embedded Linux based Implementation of MCU and the Internet Communication System Based on Wi-Fi using Raspberry Pi/ Banana Pi processor.
- HVS-826.** A Wireless Sensor Network for RF Characterization of Buildings using Embedded Linux platform for Raspberry Pi/ Banana Pi processor.
- HVS-831.** An Efficient design of Green House Monitoring and Controlling Using Android Mobile Application with Linux single board computer Raspberry Pi/ Banana Pi
- HVS-832.** Solar powered Raspberry Pi/ Banana Pi for Building Lighting Automation through the Integration of DALI with Wireless Sensor Networks.
- HVS-897.** RFID Based Prepaid Petro Card management system at Petrol Station Using Raspberry Pi/ Banana Pi ARM-11 processor.



**HVS-872.** An Intelligent Pollution Control System: Auto Ignition Cut off for Automotives by Detecting Carbon Monoxide using arm-11 core Raspberry Pi/ Banana Pi processor

**HVS-898.** An OTP generation for Password protected GSM based Device Control using Minicomputer Raspberry Pi/ Banana Pi.

**HVS-895.** Raspberry Pi/ Banana Pi processor based ATM terminal design for Fingerprint Combination for Privacy Protection.

**HVS-841.** Design of Path detection for blind people using ultrasonic sensor and mini computer Raspberry Pi/ Banana Pi processor

**HVS-842.** Raspberry Pi/ Banana Pi based Low cost high accuracy state estimation for accident collision to prevent vehicles

**HVS-825.** Embedded Linux based an improved ultra-low-power wireless sensor-station supplied by a photovoltaic harvester using mini computer Raspberry Pi/ Banana Pi processor

**HVS-833.** Wireless Bluetooth communication with Raspberry Pi/ Banana Pi design of a smart prepaid energy metering system to control electricity theft

**HVS-834.** Designing Android Applications Using Voice Controlled Commands: For Hands Free Interaction with Common Household Devices using Linux single board computer

**HVS-835.** Easy as Raspberry Pi/ Banana Pi Processor for an Electronic voting machine developed using GSM technology and Embedded Linux.

**HVS-836.** Embedded Linux based mini computer Raspberry Pi/ Banana Pi interface for Personal health monitoring with Android based mobile devices

**HVS-837.** An Ultra Violet Sterilization System with UV Lamp Failure Detection and content Volume Monitoring using Linux single board mini computer Raspberry Pi/ Banana Pi

**HVS-838.** Raspberry Pi/ Banana Pi processor based GPS data logger using Linux single board computer

**HVS-839.** Embedded Linux based Recognition of kids activities to prevent from misfortunes using triaxial accelerometer and pressure sensors using Raspberry Pi/ Banana Pi processor

**HVS-840.** ARM-11 based Multi Level High security with OTP using single board computer

**HVS-843.** An innovative solution for reallocating public bike among bike stations using RFID and GPS with Linux single board computer Raspberry Pi/ Banana Pi.

**HVS-844.** Wireless security control system and embedded web server network for smoke and fire detection using Raspberry Pi/ Banana Pi processor.

**HVS-845.** Development on gas leak detection and location system based on wireless sensor networks with arm-11 core Raspberry Pi/ Banana Pi processor.

**HVS-846.** Creating innovation with systems integration road and vehicle integrated electric transportation system using Raspberry Pi/ Banana Pi processor

**HVS-847.** An efficient design of Wireless black box using MEMS accelerometer and GPS tracking for accidental monitoring of vehicles using Raspberry Pi/ Banana Pi processor.

**HVS-808.** A Millimeter-Scale Energy-Autonomous Sensor System with Stacked Battery and Solar Cells

**HVS-809.** Cache Simulation for Instruction Set Simulator QEMU

**HVS-810.** Design and implementation of software architecture behavioral-based robot control system using Active Object Computing Model

**HVS-811.** Smart home design based on ZigBee wireless sensor network using ARM cortex M3

**HVS-812.** Graphical Software Development Methods Based on Cortex-M3 Embedded Systems

**HVS-814.** Interrupt aware queue implementation for energy efficient multitasking systems based on Cortex-M3 architecture

**HVS-813.** A multi channel data acquisition system for bolometer detectors based on microcontroller Cortex M3 architecture

**HVS-815.** Research and implementation of networked data acquisition system based on Cortex-M3

**HVS-817.** A multi-parameter signal monitoring system based on Cortex-M3

**HVS-819.** Research of roots flow meter based on ARM Cortex-M3

**HVS-821.** Energy Efficient High-Performance Computing Using ARM Cortex-A9 Cores

**HVS-931.** Automated Traffic Light Control System with VIP/Emergency Override System from Web using Raspberry Pi/ Banana Pi processor.

**HVS-932.** Design and Implementation of e-Surveillance Robot for Video Monitoring and Motion Detection using Raspberry Pi/ Banana Pi processor.

**HVS-896.** A new method of Biometric based Intelligent Industrial Devices Control using Raspberry Pi/ Banana Pi.

**HVS-873.** A New design of Voice operated Intelligent Fire extinguisher vehicle using smart phone and minicomputer Raspberry Pi/ Banana Pi processor

**HVS-874.** Embedded Implementation of Solar powered optimal power point tracking Raspberry Pi/ Banana Pi processor for industrial automation

**HVS-875.** A Single board Raspberry Pi/ Banana Pi Processor based Multitasking Hardware control using embedded Linux.

**HVS-877.** Design and Implementation of Wireless Sensor Network For Multi-Storey Building using Broadcom BCM2835 system on a chip (SoC) Raspberry Pi/ Banana Pi processor

**HVS-848.** Use of ultrasonic signal coding and PIR sensor to enhance the sensing reliability of an embedded surveillance system using Linux single board computer.

**HVS-849.** Real life applicable fall detection system based on wireless body area network using Raspberry Pi/ Banana Pi processor

**HVS-850.** Android Wi-Fi based Robot navigation system with RFID and sensors in library using arm-11 Raspberry Pi/ Banana Pi processor

**HVS-851.** Environment monitoring and device control using Raspberry Pi/ Banana Pi processor based embedded controlled sensor network

**HVS-852.** A new Multimodal interaction for service robot control using Raspberry Pi/ Banana Pi processor

**HVS-853.** Field variables monitoring in real time (GPS, soil, moisture, temperature) with precision framing applications using ARM-11 Raspberry Pi/ Banana Pi Core processor

**HVS-854.** An Autonomous robot based wheel chair control with video surveillance using Raspberry Pi/ Banana Pi

**HVS-855.** Embedded Linux based Water environment monitoring system based on zigbee technology with Raspberry Pi/ Banana Pi

**HVS-856.** Raspberry Pi/ Banana Pi processor based Management of mechanical vibration and temperature in small wind turbines using zigbee wireless network

**HVS-857.** A Low power wireless sensor network for building monitoring using Wi-Fi hotspot and Raspberry Pi/ Banana Pi processor

[www.hvstechnologies.in](http://www.hvstechnologies.in)

Ph: +91 9603140482

**Ameerpet:** #A-7, 2<sup>nd</sup> floor, Eureka court, Above KS bakers, Ameerpet, Hyderabad – 73.

**Miyapur ‘X’ Roads:** #201, Meher Plaza, Miyapur ‘X’ Roads, Hyderabad - 49.

**Dilsukhnagar:** #F-8, 1st floor, Sreemaan Rama Towers, Opp:Kalanikethan, Chaitanyapuri, Hyderabad - 62.



**HVS-858.** Embedded Linux based an intelligent house hold LED lighting system considering energy efficiency and user satisfaction with door access control system.

**HVS-859.** A new Raspberry Pi/ Banana Pi processor based design of an emergency remote security monitoring and control system based on zigbee

**HVS-860.** Design of concealed alarm system based on PIR Sensor and GSM using Raspberry Pi/ Banana Pi processor

**HVS-861.** Design implementation of intelligent campus security tracking system using zigbee & RFID with Raspberry Pi/ Banana Pi processor.

**HVS-862.** ARM-11 Raspberry Pi/ Banana Pi core processor based Digital control for home lighting system with zigbee communication

**HVS-863.** Video surveillance based on Linux Embedded Mini computer Raspberry Pi/ Banana Pi for Hazardous gas detecting method applied in coal mines detection robot

**HVS-864.** The research on zigbee based mine safety monitoring system using ARM-11 Raspberry Pi/ Banana Pi processor

**HVS-866.** A New Development of In-Home Display Systems for Residential Energy Monitoring using Raspberry Pi/ Banana Pi processor

**HVS-867.** Raspberry Pi/ Banana Pi processor based Mobile Camera usage for Cross-Screen Interaction by Object Matching and Tracking

**HVS-868.** A Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBee Network of Devices and Sensors using mini computer Raspberry Pi/ Banana Pi

**HVS-869.** Embedded Linux Raspberry Pi/ Banana Pi processor based Smart Heating and Air Conditioning Scheduling Method Incorporating Customer Convenience for Home Energy Management System

**HVS-870.** Embedded Linux based Smart Host Raspberry Pi/ Banana Pi processor for Optimal Battery Charging in a Solar-Powered Robotic Vehicle

**HVS-871.** Global Sensor Deployment and Local Coverage-aware Recovery Schemes for Smart Environments using Raspberry Pi/ Banana Pi processor

**HVS-878.** A Unique ID based SMS calling or alerting system using GSM with Real time OS Raspberry Pi/ Banana Pi processor.

**HVS-879.** Student attendance monitoring and access control using Embedded Linux OS based single board computer Raspberry Pi/ Banana Pi.

**HVS-880.** Design of Ultrasonic sensors based spectacles and waist belt for blind using mini computer arm-11 core Raspberry Pi/ Banana Pi processor

**HVS-881.** A New Product Design and Construction of an Intelligent Combat Robot for war fields using Raspberry Pi/ Banana Pi processor

**HVS-883.** An Efficient design of an Industrial Data Locker Using Android Platform with ARM-11 core Raspberry Pi/ Banana Pi processor.

**HVS-884.** Design of a Human vehicle interface using Wireless Wi-Fi Communication based on ARM-11 Raspberry Pi/ Banana Pi Processor.

**HVS-885.** Embedded Linux Raspberry Pi/ Banana Pi based an emergency message display on Android smart phone

**HVS-893.** Advanced User Controlled Roof Top Antenna Signal Tracking System with 10RPM geared DC motor using Raspberry Pi/ Banana Pi processor.

**HVS-894.** Sensor Movement Based Sensor Switching For Data Acquisition using Raspberry Pi ARM1176JZF-S processor

**HVS-921.** Application of Image Processing Techniques for the Extraction of Vehicle Number Plates over ARM target Board BCM2835 Raspberry Pi/ Banana Pi. **(IEEE2013)**

**HVS-922.** A State-of-the-Art Review for ALPR using ARM1176JZF-S Raspberry Pi/ Banana Pi (Automatic License Plate Recognition) **(IEEE2013)**

**HVS-923.** Automatic License Plate Extraction from Still Images using arm-11 and Camera (Number plate recognition and automatic gate opening system using Raspberry Pi/ Banana Pi **(IEEE2013)**)