



## **ESTECHPOINT**

### **IEEE 2018-2019 HOT TOPICS**

#### **ELECTRICAL – ENERGY**

ESP\_001. IOT BASED POWER CONSUMPTION MONITORING

ESP\_002. AUTOMATIC SOLAR TRACKING

ESP\_003. BIDIRECTIONAL THERMOELECTRIC ENERGY GENERATOR BASED ON A PHASE-CHANGE LENS FOR CONCENTRATING SOLAR POWER

#### **BIOMEDICAL**

ESP\_004. NON-INVASIVE BLOOD GLUCOSE ESTIMATION.

ESP\_005. ROBOTIC AUTOMATED EXTERNAL DEFIBRILLATOR AMBULANCE FOR EMERGENCY MEDICAL SERVICE IN SMART CITIES.

#### **WIRELESS**

ESP\_006. GREEN HOUSE MONITORING

ESP\_007. SMART CAR PARKING USING WSN

ESP\_008. A DUAL-CHANNEL, INTERFERENCE-FREE, BACTERIA-BASED BIOSENSOR FOR HIGHLY-SENSITIVE WATER QUALITY MONITORING

ESP\_009. COMMUNICATION-BASED TRAIN CONTROL SYSTEM PERFORMANCE OPTIMIZATION USING DEEP REINFORCEMENT LEARNING

ESP\_010. EFFICIENT ID BASED SECURED TROLLEY SYSTEMS USING RFID AND 802.15.4 TECHNOLOGY

#### **WIRELESS POWER TRANSFER**

ESP\_011. WIRELESS POWER TRANSFER FOR ELECTRIC VEHICLE APPLICATIONS

ESP\_012. WIRELESS POWER TRANSFER SYSTEM FOR SMART HOME APPLICATION

## **ROBOTICS**

ESP\_013.GESTURE BASED ROBOT

## **PLC**

ESP\_014. Next Generation Narrowband (Under 500 kHz) Power Line Communications (PLC) Standards

ESP\_015.USER-FRIENDLY MONITORING SYSTEM FOR RESIDENTIAL PV SYSTEM BASED ON LOW-COST POWER LINE COMMUNICATION

ESP\_016.DESIGN AND IMPLEMENTATION OF SMART HOME CONTROL SYSTEMS BASED ON WIRELESS SENSOR NETWORKS AND POWER LINE COMMUNICATIONS

## **LI-FI**

ESP\_017.A NON-INVASIVE REMOTE HEALTH MONITORING SYSTEM USING VISIBLE LIGHT COMMUNICATION

ESP\_018.VLC-SIGNALS DISTRIBUTION FOR IN-HOME WIRELESS NETWORKS

ESP\_019.VEHICLE TO VEHICLE COMMUNICATION

ESP\_020. COOPERATIVE LOAD BALANCING IN HYBRID VISIBLE LIGHT COMMUNICATION.

## **BLUETOOTH**

ESP\_021. Door Automation system based on speech command Android smartphone

## **RSSI**

ESP\_022.UTILIZATION OF WSN MODULES FOR RSSI LOCALIZATION USING SMART TOLLGATE AUTOMATION

ESP\_023..RSSI OVERBOARD LOCALIZATION SYSTEM FOR SAFE EVACUATION OF LARGE PASSENGERS SHIPS.

SP\_024. A ROBOT LOCALIZATION SYSTEM COMBINING RSSI AND PHASE SHIFT IN UHF-RFID SIGNALS

## **NFC**

ESP\_025.AN OPEN NFC-BASED PLATFORM FOR VITAL SIGNS MONITORING

## **RASPBERRY-PI**

ESP\_026. EYE-GAZE TRACKING METHOD DRIVEN BY RASPBERRY PI APPLICABLE IN AUTOMOTIVE TRAFFIC SAFETY.

ESP\_027. ENHANCED SMART DOORBELL SYSTEM BASED ON FACE RECOGNITION.

ESP\_028. A PILOT STUDY DEVELOPMENT OF HOME AUTOMATION VIA RASPBERRY PI

ESP\_029. DEVELOPMENT OF IOT BASED SMART SECURITY AND MONITORING DEVICES FOR AGRICULTURE

ESP\_030. MONITORING AND CONTROLLING OF MOBILE ROBOT VIA INTERNET THROUGH RASPBERRY PI BOARD

ESP\_031. ROAD SIGN RECOGNITION SYSTEM ON RASPBERRY PI

## **INTERNET OF THINGS (IoT)**

ESP\_032. WEB BASED AUTOMATIC IRRIGATION SYSTEM.

ESP\_033. IOT BASED ANIMAL HEALTH MONITORING.

ESP\_034. WATER MANAGEMENT SYSTEM USING DYNAMIC IP BASED EMBEDDED WEBSERVER IN REAL TIME

ESP\_035. I-LEARNING LOT: AN INTELLIGENT SELF LEARNING SYSTEM FOR HOME AUTOMATION USING IOT.

ESP\_036. MULTI-HOP WBAN CONSTRUCTION FOR HEALTHCARE IOT SYSTEMS

ESP\_037. AN INTERNET OF THINGS APPROACH FOR RFID SMART TOLLGATE AUTOMATION

## **VIRTUAL REALITY**

ESP\_038.DYNAMIC VISION SENSOR BASED HIGH EFFICIENT DEVICE CONTROL SYSTEM.

ESP\_039.DESIGN OF MOBILE ROBOT TELEPORTATION SYSTEM BASED ON VIRTUAL REALITY

ESP\_040. VIRTUAL HAND-BUTTON INTERACTION IN A GENERIC VIRTUAL REALITY FLIGHT SIMULATOR

ESP\_041.BRINGING BASIC ACCESSIBILITY FEATURES TO VIRTUAL REALITY CONTEXT

ESP\_042:A REALISTIC WALKING MODEL FOR ENHANCING REDIRECTION IN VIRTUAL REALITY

ESP\_043:VIRTUAL TOUCH SCREEN “VIRTOS” IMPLEMENTING VIRTUAL TOUCH BUTTONS AND VIRTUAL SLIDERS USING A PROJECTOR AND CAMERA

## **GPS AND GSM**

ESP\_044.GPS BASED AUTONOMOUS VEHICLE NAVIGATION AND CONTROL SYSTEM

ESP\_045.DETECTION OF DISTRACTION UNDER NATURALISTIC DRIVING USING GALVANIC SKIN RESPONSES

ESP\_046. GSM BASED GARBAGE AND WASTE COLLECTION BINS OVERFLOW INDICATOR

## **ANDROID**

ESP\_047. AN SMARTPHONE-BASED DOOR LOCKING

ESP\_048.CONTINUOUS MEASURE OF CARDIAC SIGNAL IN ANDROID SMARTPHONE DEVICES

## **IBEAON**

ESP\_049:A MOBILE INDOOR POSITIONING SYSTEM BASED ON IBEAON TECHNOLOGY

ESP\_050:ACCURATE INDOOR LOCALIZATION BASED ON THE INERTIAL NAVIGATION AND THE IBEAON