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_035.1. 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

IBEACON

ESP_049. A MOBILE INDOOR POSITIONING SYSTEM BASED ON IBEACON TECHNOLOGY

ESP_050. ACCURATE INDOOR LOCALIZATION BASED ON THE INERTIAL NAVIGATION AND THE IBEACON