

Solutions Pvt. Ltd



- Research & Development Program (RDP)
- Final Year Academic Project (FAP) in Software and Embedded Technologies
- Application Development Program (ADP)

PROJECT TITLES GUIDE 2016-2017





EMBEDDED

ARDUINO S.No **Title** Year Gait Generation with Smooth Transition Using CPG-Based 1 2016 Locomotion Control for Hexapod Walking Robot Automatic Toll E-Ticketing System For Transportation Systems 2016 2 3 Smart Lighting: Developing A Smarter Control Mechanism For 2016 Park Trail Lighting Smart Real-Time Healthcare Monitoring And Tracking System 4 2016 Using Gsm/Gps Technologies 5 Embedded System Design Of A Real-Time Parking Guidance 2016 System AnyClimb: A New Wall-Climbing Robotic Platform for Various 6 2016 Curvatures Mixed Integer Programming-BasedSemiautonomous Step 7 2016 Climbingof a Snake Robot ConsideringSensing Strategy An Experimental Study on the PID and Fuzzy-PID Controllers 8 on a Designed Two-Wheeled Self-Balancing Autonomous 2016 Robot Turning the internet of (my) things into a remote 9 2016 controlled laboratory Design and Implementation of a System Access 10 2016

WE CAN ALSO IMPLEMENT YOUR OWN CONCEPT/IDEA



	Control by RFID	
11	A Novel Approach For Communication Among	2015
	Blind, Deaf And Dumb People	2015
12	Electronic Speaking System For Speech Impaired People: Speak	2015
	Up	2015
13	Biometric Access For A Secure Smart Robot	2015
14	Road Conditions Detection Using Arduino Based Sensing	2015
	Module And Smartphone	2015
15	Iot-Based Physiological And Environmental Monitoring System	2015
	In Animal Shelter	
16	Portable Heart Rate Measurement For Remote Health	2015
	Monitoring System	2013
17	Arduino And Gsm Based Smart Energy Meter For Advanced	2015
	Metering And Billing System	2015
18	The Effect Of Wheel Spin Velocity On The Propagation Of	
	Signal To Enhance The Performance Of Tire Pressure	2015
	Monitoring System	



RASPBERRY PI		
S.No	Title	
1	Development of a Portable Near Infrared Camera for	2016
	Early Detection of Diabetic Ulcers	2016
2	Road Sign Recognition System on Raspberry Pi	2016
3	Computer Vision Approach Based Speed Limit Assistant	2016
4	A Computationally Low Cost Vision Based Tracking Algorithm	2016
	for Human Following Robot	2010
5	Open-Source Smart Home Modules	2016
6	Development of a Highly Accurate and Low Cost	2016
	Measurement Device for Field Operational Tests	2010
7	Cost Effective Digital Signage System	2016
	using Low Cost Information Device	2010
8	A Remote Lab for Teaching Mechanics	2016
9	Design of an IoT-Based E-Learning Tested	2016
10	Quick Find: Fast and Contact-free Object Detection	2016
	Using a Depth Sensor	2010
11	An Intelligent System For Monitoring And Controlling	2015

Of Street Light Using Gsm Technology

Bluetooth Enabled Printer Adapter Using Raspberry Pi

2015

12



13	Turning The Internet Of (My) Things Into A Remote Controlled Laboratory	2015
14	Sepia: Secure-Pin-Authentication-As-A-Service For	2015
	Atm Using Mobile And Wearable Devices	2015
15	Healthcare Based On Lot Using Raspberry Pi	2015
16	Development Of Cloud Based Light Intensity	2015
	Monitoring System Using Raspberry Pi	2015
17	Determination Of Ripeness And Grading Of Tomato	2015
	Using Image Analysis On Raspberry Pi	2015
18	Autonomous Camera Based Eye Controlled	2015
	Wheelchair System Using Raspberry-Pi	2015
19	One Approach To Weather Station Design Based	2015
	On Raspberry Pi Platform	2015
20	Advanced Vehicle Monitoring And Tracking System	2015
	Based On Raspberry Pi	

INTERNET OF THINGS		
S.No	Title	
1	Water Level Meter For Alerting Population About	2016
	Floods	2016
2	Smart Parking System For Internet Of Things	2016



3	Point-N-Press: An Intelligent Universal Remote	2016
	Control System For Home Appliances	
4	Intuitive Iot-Based H2u Healthcare System For	2016
	Elderly People	2016
5	Design And Implementation Of Interoperable Iot	2016
	Healthcare System Based On International Standards	2016
6	Improving The Security Of Wireless Sensor Networks In An Iot	2016
	Environmental Monitoring System	2016
7	Rfid-Based Book Finder	2016
8	Effective Ways To Use Internet Of Things In The Field Of	2016
	Medical And Smart Health Care	2016
9	Navigating The Challenges Of Internet Of Things (Iot)	2016
	For Power And Energy Systems	2010
10	The Future of Ultra-Wideband Localization in RFID	2016
11	Developing An Open Access Monitoring Device For Off-Grid	2016
	Renewables	2010
12	Secure Data Analytics for Cloud- Integrated Internet of	2016
	Things Applications	2010
13	An IoT-based Scheme for Real Time Indoor	2016
	Personal Exposure Assessment	2010
14	IoT Healthcare Analytics: The Importance of	2016
	Anomaly Detection	2010
15	Interoperability of IoT Wireless Technologies in	2016



	Ambient Assisted Living Environments	
16	Improving the Security of Wireless Sensor	
	Networks in an IoT Environmental Monitoring	2016
	System	
17	A neural network and IoT based scheme for	
	performance assessment in Internet of Robotic	2016
	Things	

	LIFI	
S.No	Title	
1	Impact Of Vlc On Light Emission Quality Of White Leds	2016
2	Stereo Audio Streaming Via Visible Light	2016
3	Uncoordinated Multiple Access Scheme For Vlc Systems With Positioning Capability	2016
4	Coexistence Of Wifi And Lifi Toward 5g: Concepts, Opportunities, And Challenges	2016
5	Implementation Of Zigbee-Vlc System To Support Light Control Network Configuration	2016
6	Inter-Building Plc-Vlc Integration Based On Psk And Csk Techniques	2016
7	Ecofriendly Data Transmission In Visible Light Communication	2015



8	Smart Home Technologies Using Visibe Light Communication	2015
9	A Visible Light Communication Link Protection Mechanism	2015
	For Smart Factory	2015
10	An Indoor Broadband Broadcasting System	2015
	Based On Vlc	2015
11	Separate Dimming Controlling And Data Transmission For An	2015
	Indoor Visible Light Communication System	2013
12	Indoor Mimo Visible Light Communications:	2015
	Novel Angle Diversity Receivers For Mobile Users	2015
13	Experimental Biomedical Ecg Signal Transmission Using Vlc	2015

	ROBOTICS		
S.No	Title		
1	Mobile Robot For Retail Inventory Using Rfid	2016	
2	Methodology Of Embedded System Design	2016	
	For Underwater Vehicle	2010	
3	Fall Detection And Prevention Control Using	2016	
	Walking-Aid Cane Robot	2010	
4	Optimized Assistive Human–Robot Interaction	2016	
	Using Reinforcement Learning	2010	
5	Design And Manufacture Of Bio-Mimic Robotic Fish	2016	



6	A Lightweight Robotic Arm With Pneumatic Muscles For	2016
	RobotLearning	2010
7	A Two-Fingered Underactuated Anthropomorphic	2016
	ManipulatorBased On Human Precision Manipulation Motions	2016
8	Wirelessly Controlled Mines Detection Robot	2016
9	Line Detecting And Tracking Of A Mobile Robot With Multiple	2016
	Rgb-D Cameras	2010
10	Integration Of Structural Health MonitoringAnd Intelligent	
	Transportation Systems ForBridge Condition Assessment:	2016
	CurrentStatus And Future Direction	
11	Planar Path Following Of Underwater Snake Robots	2016
	In The Presence Of Ocean Currents	2010
12	Hierarchical And Networked VehicleSurveillance In Its: A	2016
	Survey	2010
13	Auto Calibrated Head Orientation Controller for	
	Robotic-Wheelchair Using MEMS Sensors and	2016
	Embedded Technologies	
14	A Dataset for Improved RGBD-based Object	
	Detection and Pose Estimation for Warehouse	2016
	Pick-and-Place	
15	Enhancing Human-Robot Interaction by Interpreting Uncertain	
	Information in Navigational Commands Based on	2016
	Experience and Environment	



16	The Soft-SixthFinger: a Wearable EMG Controlled	
	Robotic Extra-Finger for Grasp Compensation in	2016
	Chronic Stroke Patients	

	WIRELESS	
S.No	Title	2016
1	Configurable Zigbee-Based Control System For	2016
	People With Multiple Disabilities In Smart Homes	2016
2	Wireless Power Transmission For Multiple Devices	2016
3	A Novel Wireless Multifunctional Electronic	
	Current Transformer Based On Zigbee-Based	2016
	Communication	
4	Wireless Gas Leak Detection And Localization	2016
5	A Mobile Zigbee ModuleIn A Traffic Control System	2016
6	Milk Products Monitoring SystemWith Arm Processor For EarlyDetection Of Microbial Activity	2016
7	Interoperability Of Iot Wireless Technologies In	2016
	Ambient Assisted Living Environments	2016
8	Zigbee Network System For Observing Operating	2016
	Activities Of Work Vehicles	
9	Interoperability Of Iot Wireless Technologies In	2016



	Ambient Assisted Living Environments	
10	Wireless Stethoscope For Recording Heart And Lung Sound	2016
11	The Design Of Building Fire Monitoring System Based On	2016
	Zigbee-Wifi Networks	2016

	BIO MEDICAL	
S.No	Title	2016
1	Brain Computer Interface And Arduino microcontroller Family	2016
	Software Interconnection Solution	2016
2	Development Of A Brain-Computer Interface	
	Based On Visual Stimuli For The Movement Of A	2016
	Robot Joints	
3	Secure Management Of Low Power Fitness Trackers	2016
4	A Circuit Model Of Real Time Human Body	2016
	Hydration	2016
5	Autodietary: A Wearable Acoustic Sensor System	2016
	For Food Intake Recognition In Daily Life	2016
6	Robotic Automated External DefibrillatorAmbulance For	2016
	Emergency MedicalService In Smart Cities	
7	Real-Time Patient Health Monitoring And Alarming	2016
	Using Wireless-Sensor-Network	



8	Bsn-Care: A Secure Iot-Based Modern	2016
	Healthcare System Using Body Sensor Network	2016
9	A Multi-Signal Acquisition System For Preventive	
	Cardiology With Cuff-Less Bp Measurement	2016
	Capability	
10	Sensing Method Of Patient's Body Movement	2016
	Without Attaching Sensors On The Patient's Body	2016
12	Skin Temperature Prediction In Lower Limb	2016
	Prostheses	2016
13	Smart Brief Monitoring System For Assisted Living	2016
14	A Mechanism To Access The Medical Information	2016
	And A Modeling Approach For Medical Hazards	2016
15	Estimation Of Circadian Body Temperature Rhythm Based On	2016
	Heart Rate In Healthy, Ambulatory Subjects	2010
16	An Energy Efficient Sensor For Thyroid Monitoring Through	2016
	The Iot	2016

	GSM AND GPS	
S.No	Title	
1	Navigating The Challenges Of Internet Of Things (Iot)	2016
	For Power And Energy Systems	2016



2	Automatic Oil Tank Truck Alarm System From Illegal	
	Fuel Hoarding With Microcontroller And GSM	2016
	Module Based System	
3	GPS Based Autonomous Vehicle Navigation And Control	2016
	System	2016
4	A Mobile Zigbee Module In A Traffic Control System	2016
5	Train Ticket Gate System Employing Optical Wireless	2016
	Communications	2016
6	Smart Vehicle Security System For Defending Against	2016
	Collaborative Attacks By Malware	2016

	CONSUMER ELECTRONICS	
S.No	Title	2016
1	Abnormal Moving Vehicle Detection For Driver Assistance	2016
	System In Nighttime Driving	
2	A Mobile Robot Which Can Follow And Lead Human By	2016
	Detecting User Location And Behavior With Wearable Devices	2016
3	Blind User Wearable Audio As Distance For Indoor Navigation	2016
	Based On Visual Markers And Ultrasonic Obstacle Detection	



	AUTOMATION	
S.No	Title	2016
1	A Fuzzy-Based Building Automation Control System	2016
2	Smartphone: The Key To Your Connected Smart Home	2016
3	A Low Cost Smart Irrigation Control System	2016
4	Analysis Of Influence On Driver Behaviour While Using In- Vehicle Traffic Lights With Application Of Head-Up Display	2016
5	Robust Multirate On-Road Vehicle Localization For Autonomous Highway Driving Vehicles	2016
6	Design And Fabrication Of An Underwater Remotely Operated Vehicle	2016
7	Likelihood-Field-Model-Based Dynamic Vehicle Detection And Tracking For Self-Driving	2016
8	Automatic Rationing System	2016
VIRTUAL REALITY		
S.No	Title	
1	Press Dedicated Machine Show-Room, A Direct Application Of Augmented Reality In Industry.	2016
2	Ship Detection In Spaceborne Optical Image With SVD	2016



	Networks	
3	Automatic Speed Adjustment For	
	Travel Through Immersive Virtual Environments Based On	2016
	Viewpoint Quality	
4	Cognitive Load Measurement In A Virtual Reality-Based	2016
	Driving System For Autism Intervention	2016

Education Partners:















Technologies and Domain used:

IEEE 2016, Java, J2ee, Android, Dot net, PHP, Embedded, Vlsi, Matlab, VB, Net working, Data Mining, Image Processing, Cloud Computing, Mobile Computing, Multimedia, Network Security, Soft Engg, Grid Computing, Automation, Robotics, Communication, RF, Zigbee, Blue tooth, GSM/GPS/G-PRS, Power Electronics & Systems, Electrical, DSP, RTOS, Bio metrics, etc.

Features

- Latest 2016 IEEE, Science Direct, ACM based project concept and solutions.
- State of the art infrastructure, Innovative Project training methods.
- All our efforts are focused on students to meet industry requirements.
- Our environment is encapsulated with doctorates, professionals and other experts.
- Excellent Placements through our Spiro HR Management Consultants (SMC) Pvt Ltd.

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