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Cultivating Qualities

SPIRO

Solutions Pvt. Ltd

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

AN ISO 9001:2008 CERTIFIED R&D COMPANY

PROJECT TITLES GUIDE
2012-2013

SPIRO

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About Spiro

Spiro Solutions South India's leading Research & Development Organization. Over a decade, we are furnishing individuals in all technologies and domains by fulfilling their desires in Research & Development sector through efficient training methodologies. All our efforts are focused on students to meet industry requirements.

The global presence and reach attained by Spiro is not only substantiated by its presence, but also by the environment provided for the students. Since our environment is encapsulated with doctorates, professionals and other experts. Accordingly, we created a setting which enables student to recover from the existing learning processes and making them to be an intellect.

In our increasing globalization, Spiro moves forward to unite the desires of students and challenges of the future in R & D sector by improving the agility and enabling students to achieve sustainable growth over their rivalry. For future enhancement, industry based knowledge's are provided for students in various levels. To sum up, we are filling student necessities in all possible ways to make career brighter in their desired field.

MATLAB

IMAGE PROCESSING

TECHNOLOGY: MATLAB-IMAGE PROCESSING

DOMAIN: IMAGE PROCESSING

1	ITIMP01	Change Detection in Synthetic Aperture Radar Images based on Image Fusion and Fuzzy Clustering	In this paper is based on unsupervised distribution-free change detection approach for synthetic aperture radar (SAR) images based on an image fusion strategy and a novel fuzzy clustering algorithm. Experiments on real SAR images show that the image fusion strategy integrates the advantages of the log-ratio operator and the mean-ratio operator and gains a better performance. The change detection results obtained by the improved fuzzy clustering algorithm exhibited lower error than its preexistences.	2012
2	ITIMP02	Image Quality Assessment Based on Gradient Similarity	In this proposed scheme considers both luminance and contrast structural changes to effectively assess image quality. The effects of the changes in luminance and contrast structure are integrated via an adaptive method to obtain the overall image quality score. Extensive experiments conducted with six publicly available subject-rated databases have confirmed the effectiveness, robustness, and efficiency of the proposed scheme in comparison with the relevant state-of-the-art schemes.	2012
3	ITIMP03	Removing Boundary Artifacts for Real-Time Iterated Shrinkage deconvolution	In this paper we propose a solution to the problem of boundary artifacts appearing in several recently published fast deblurring algorithms based on iterated shrinkage thresholding in a sparse domain and Fourier domain deconvolution. Our approach adapts an idea proposed by Reeves for deconvolution by the Wiener filter.	2012

4	ITIMP04	Interpolation-Based Image Super-Resolution using multisurface Fitting	In this paper, we propose a new interpolation-based method of image super-resolution reconstruction. The idea is using multisurface fitting to take full advantage of spatial structure information. Each site of low-resolution pixels is fitted with one surface, and the final estimation is made by fusing the multisampling values on these surfaces in the maximum a posteriori fashion.	2012
5	ITIMP05	A Semisupervised Segmentation Model for Collections of Images	In this paper, we consider the problem of segmentation of large collections of images. We propose a semi supervised optimization model that determines an efficient segmentation of many input images. The advantages of the model are twofold. The proposed model is effective for segmentation and is computationally efficient	2012
6	ITIMP06	Image Fusion Using Higher Order Singular Value Decomposition	In this paper proposes novel higher order singular value decomposition (HOSVD)-based image fusion. This paper proposes a novel and flexible sigmoid-function-like coefficient-combining scheme, which incorporates the usual choose-max scheme and the weighted average scheme, and easily extends the proposed algorithm to fuse multiple or color images.	2012
7	ITIMP07	Blind Separation of Image Sources via Adaptive Dictionary Learning	In this paper, we address fail to successfully recover the sources problem and attempt to give a solution via fusing the dictionary learning into the source separation. The proposed algorithm is designed to adaptively learn the dictionaries from the mixed images within the source separation process. In the proposed hierarchical method, a local dictionary is adaptively learned for each source along with separation. This process improves the quality of source separation even in noisy situations.	2012
8	ITIMP08	A New Method for Cross-Normalization and multitemporal Visualization of SAR Images for the Detection of Flooded Areas	This paper is based on multitemporal synthetic aperture radar (SAR) images. Cross-calibration/normalization is proposed to solve this problem. This, in turn, facilitates image enhancement and the numerical comparison of different image takes together with data fusion and visualization processes.	2012

9	ITIMP09	Human Identification Using Finger Images	In this proposed system simultaneously acquires the finger-vein and low-resolution fingerprint images and combines these two evidences using a novel score-level combination strategy. Our finger-vein identification approach utilizes peg-free and more user-friendly unconstrained imaging. We develop and investigate two new score-level combinations, i.e., holistic and nonlinear fusion, and comparatively evaluate them with more popular score-level fusion approaches to ascertain their effectiveness in the proposed system.	2012
10	ITIMP10	Blind Deconvolution Using Generalized Cross-Validation Approach to Regularization Parameter Estimation	In this paper, we propose and present an algorithm for total variation (TV)-based blind deconvolution. Both the unknown image and blur can be estimated within an alternating minimization framework. The performance of the proposed algorithm is better than variation Bayesian blind deconvolution algorithms with Student's-t priors or a total variation prior.	2011
11	ITIMP11	Image Resolution Enhancement by using Discrete and Stationary Wavelet Decomposition	In this work, we are proposing an image resolution enhancement technique which generates sharper high resolution image. DWT is applied in order to decompose an input image into different subbands. Then the high frequency subbands as well as the input image are interpolated. The estimated high frequency subbands are being modified by using high frequency subband obtained through SWT. Then all these subbands are combined to generate a new high resolution image by using inverse DWT (IDWT).	2011
12	ITIMP12	HAIRIS: A Method for Automatic Image Registration Through Histogram-Based Image Segmentation	In this paper, a method for automatic image registration through histogram-based image segmentation (HAIRIS) is proposed. This new approach mainly consists in combining several segmentations of the pair of images to be registered, according to a relaxation parameter on the histogram modes delineation (which itself is a new approach), followed by a consistent characterization of the extracted objects through the objects area, ratio between the axis of the adjust ellipse, perimeter and fractal dimension and a robust statistical based procedure for objects matching. The application of the proposed methodology is illustrated to simulated rotation and translation.	2011

13	ITIMP13	Fine-Granularity and Spatially-Adaptive Regularization for Projection-Based Image deblurring	This paper studies two classes of regularization strategies to achieve an improved tradeoff between image recover and noise suppression in projection-based image deblurring. The first is based on Fine-granularity regularization. Inspired by the equivalence between Landweber iteration and projection onto convex set. The second class of regularization strategy is Spatially adaptive regularization. we propose to gradually decrease the regularization parameter to achieve spatial adaptation.	2011
14	ITIMP14	Real time artifact-free image upscaling	In this paper we propose a new upscaling method (ICBI, Iterative Curvature Based Interpolation). In our tests against similar edge directed methods, our method demonstrated to be an improvement over previous ones, providing a reasonable reconstruction of the missing information and requiring considerably less computational power than other methods achieving good scores.	2011
TECHNOLOGY: MATLAB-IMAGE PROCESSING DOMAIN: STEGANOGRAPHY				
15	ITIMP15	Scalable Coding of Encrypted images	In this paper proposes a novel scheme of scalable coding for encrypted images. In the encryption phase, the original pixel values are masked by a modulo-256 addition with pseudorandom numbers that are derived from a secret key. After decomposing the encrypted data into a down sampled subimage and several data sets with a multiple-resolution construction At the receiver side, the quantized coefficients can be used to reconstruct the detailed content with an iteratively updating procedure.	2012
16	ITIMP16	On the Selection of Optimal Feature Region Set for Robust Digital Image Watermarking	In this paper proposes novel feature region selection method for robust digital image watermarking .This method aims to select a nonoverlapping feature region set, which has the greatest robustness against various attacks and can preserve image quality as much as possible after watermarked. It performs a simulated attacking procedure using some predefined attacks to evaluate the robustness of every candidate feature region. According to the evaluation results, it then adopts a track-with-pruning procedure to search a minimal primary feature set which can resist the most predefined attacks.	2011

17	ITIMP17	An Optimal Data Hiding Scheme With Tree-Based Parity Check	In this paper we propose a majority vote strategy produces a stego object with least distortion under the tree based parity check model.	2011
TECHNOLOGY: MATLAB-IMAGE PROCESSING DOMAIN: BIOMEDICAL				
18	ITIMP18	Nonstationary Harmonic Modeling for ECG Removal in Surface EMG Signals	We present a compact approach for mitigating the presence of (ECG) in surface (EMG) signals by means of time-variant harmonic modeling of the cardiac artifact. Once the model parameters (Polynomial coefficients) are estimated, the ECG signal component is generated and subtracted from the mixture in order to obtain the EMG	2012
19	ITIMP19	An Ensemble-Based System for Microaneurysm Detection and Diabetic Retinopathy Grading	We propose an ensemble-based framework to improve microaneurysm detection. We provide an ensemble creation framework to select the best combination. An exhaustive quantitative analysis is also given to prove the superiority of our approach over individual algorithms. We also investigate the grading performance of our method, which is proven to be competitive with other screening systems.	2012
20	ITIMP20	Boundary Detection in Medical Images Using Edge Following Algorithm Based on Intensity Gradient And Texture Gradient Features	This paper introduces a new edge following technique for boundary detection in noisy images. Our proposed technique can detect the boundaries of objects in noisy images	2011
21	ITIMP21	Multichannel Image Registration by Feature-Based Information Fusion	The proposed method uses feature-level information fusion method to spatio-adaptively combine the complementary information from different modalities that characterize different tissue types, through Gabor wavelets transformation and Independent Component Analysis (ICA), to produce a robust inter-subject registration. The results show that the proposed multichannel image registration method can integrate and enhance complementary information, while eliminating the less reliable/redundant information from different channels.	2011

22	ITIMP22	MRF-Based Intensity Invariant Elastic Registration of Cardiac Perfusion Images Using Saliency Information	In this paper, we propose a Markov random field based method that uses saliency and gradient information for elastic registration of dynamic contrast enhanced (DCE) magnetic resonance (MR) images of the heart. Saliency information contributes to a contrast invariant metric to identify similar regions in spite of contrast enhancement. Saliency is also used in a modified narrow band graph cut framework to identify relevant pixels for registration, thus reducing the number of graph nodes and computation time.	2011

DIGITAL SIGNAL PROCESSING

TECHNOLOGY: MATLAB
DOMAIN: DIGITAL SIGNAL PROCESSING

23	ITDSP01	Finitely Supported L2- Optimal Kernels for Digital Signal Interpolation	In this project We derive a new family of unconstrained, finitely supported L2-optimal interpolation kernels HL(x), and compare their properties to the previously known results. Our research demonstrates that L2 -optimal kernels provide superior interpolation quality	2012
24	ITDSP02	Minimum Euclidean Distance Based Precoders for MIMO Systems Using Rectangular QAM Modulations	In this paper, an efficient precoder is designed that maximizes the minimum Distance of two received vectors is studied. This criterion leads to a nondiagonal precoding scheme and allows achieving a full diversity order. So we propose herein a general form of minimum Euclidean distance based Precoders for all rectangular QAM modulations.	2012
25	ITDSP03	Global Stabilization of the Least Mean Fourth Algorithm	In this project fully deals with stability of the least mean fourth algorithm. This is achieved by normalizing the weight vector update term by a term that is fourth order in the regressor and second order in the estimation error.	2012
26	ITDSP04	Derivation of the Bias of the Normalized Sample Covariance Matrix in a Heterogeneous Noise With Application to Low Rank STAP Filter	In this project, we have developed a low rank (LR) spatiotemporal adaptive processing (STAP) filter when the disturbance is modeled as the sum of a low rank spherically invariant random vector (SIRV) clutter and a zero mean white Gaussian noise. This LR-STAP filter is built from the normalized sample covariancematrix (NSCM) and exhibits good robustness properties to secondary data contamination by target components.	2012

27	ITDSP05	Opportunistic Distributed Space-Time Coding for Decode-and-Forward Cooperation Systems	In this paper, we consider a decode-and-forward (DF) cooperation system consisting of two cooperative users in sending their information to a common destination, for which the distributed space-time coding (DSTC) is applied in an opportunistic manner, called opportunistic DSTC (O-DSTC), depending on whether the two users succeed in decoding each other's information or not. We evaluate the outage performance of the proposed O-DSTC as well as the conventional selective DF (SDF) cooperation and fixed DSTC (F-DSTC) schemes.	2012
28	ITDSP06	QR Decomposition-Based Matrix Inversion for High Performance Embedded MIMO Receivers	In this project A matrix inversion approach based on modified squared Givens rotations (MSGR). This is a new QR decomposition algorithm that prohibits their application to MIMO systems. A novel modification that further reduces the complexity of MSGR by almost 20%.This enables real-time implementation with negligible reduction in the accuracy of the inversion operation, or the BER of a MIMO receiver based on this algorithm.	2011
29	ITDSP07	Subspace SNR Maximization: The Constrained Stochastic Matched Filter	Constrained stochastic matched filter (CSMF), is an extension of the Stochastic matched filter itself derived from the matched filter. In this project the CSMF is optimal in the sense that it maximizes the signal-to-noise ratio in a subspace whose dimension is fixed a priori. Evaluation of the algorithm's performance is completed through estimation of receiver operating characteristic curves.	2011

COMMUNICATION SYSTEM

TECHNOLOGY: MATLAB
DOMAIN: COMMUNICATION SYSTEM

30	ITCM01	On the Minimum Differential Feedback for Time-Correlated Rayleigh Block-Fading Channels	In this paper, we investigate the differential channel state information (CSI) feedback problem for a general multiple input multiple output (MIMO) system over time-correlated Rayleigh block-fading channels.	2012

31	ITCM02	Optimal Channel and Relay Assignment in OFDM-Based Multi-Relay Multi-Pair Two-Way Communication Networks	This paper considers a wireless relay network where multiple user pairs conduct bidirectional communications via multiple relays based on orthogonal frequency-div multiplexing (OFDM) transmission.	2012
32	ITCM03	On Performance Improvement of Wireless Push Systems via Smart Antennas	In this paper, we propose an adaptive smart antenna based wireless push system where the beamwidth of each smart antenna is altered based on the current placement of clients within the system area.	2012
33	ITCM04	Secure Communication in the Low-SNR Regime	In this project Energy efficiency is analyzed by finding the minimum bit energy required for secure and reliable communications, and the wideband slope.	2012
34	ITCM05	On Optimal Front-End Filter for Single-User Detection in IR-UWB Systems	In this paper, we show that by employing a new front-end filter at the receiver, the non-whiteness of the MAI can be exploited to improve the performance of the single-user detector.	2012
35	ITCM06	Cooperative Spectrum Sharing Protocol with Selective Relaying System	In this paper, we propose a two-phase protocol based on cooperative relaying for a secondary system to achieve spectrum access along with a selective relaying primary system.	2012
36	ITCM07	Diversity Gain and Outage Probability for MIMO Free-Space Optical Links with Misalignment	A novel statistical channel model for multiple-input multiple-output (MIMO) free-space optical (FSO) communication systems impaired by atmospheric and misalignment fading is developed. A slow-fading channel model is considered and the outage probability is derived as a performance measure.	2012
37	ITCM08	Uncoordinated Beamforming for Cognitive Networks	In this paper, we propose jointly-optimized Beamforming algorithms for cognitive networks to maximize the achievable rates, where primary and cognitive users share the same spectrum and are equipped with multiple antennas.	2012
38	ITCM09	Asymptotic Capacity of Large Relay Networks with Conferencing Links	In this project, we consider a half- duplex large relay network, consisting of one source-destination pair and N relay nodes, each of which is connected with a subset of the other relays via signal-to-noise ratio (SNR)limited out-of-band conferencing links	2012

39	ITCM10	Two Useful Bounds Related to Weighted Sums of Rayleigh Random Variables with Applications to Interference Systems	In this letter, we derive an upper bound on the distribution of the ratio of a Rayleigh faded signal to a sum of weighted Rayleigh RVs plus a nonnegative constant, dubbed the generalized ratio(GR).	2012
40	ITCM11	Performance Analysis over Slow Fading Channels of a Half-Duplex Single-Relay Protocol: Decode or Quantize and Forward	In this work, a static relaying protocol, called Decode or Quantize and Forward (DoQF), is introduced for half duplex single-relay networks, and its performance is studied in the context of communications over slow fading wireless channels.	2012
41	ITCM12	Analytic Framework for the Effective Rate of MISO Fading Channels	In this paper, we pursue a detailed effective rate analysis of Nakagami-m, Rician and generalized-K multiple input single-output (MISO) fading channels by deriving new, analytical expressions for their exact effective rate.	2012
42	ITCM13	Diversity-Multiplexing Tradeoff of MIMO Multiple-Access Systems with Successive Cancellation Receivers Having Imperfect Cancellation	In order to analyze the asymptotic performance of each user in a practical multiple-access system, we derive the per-user DMT considering error propagation due to imperfect cancellation of the SC process.	2012
43	ITCM14	Diversity-Multiplexing-Delay Tradeoff in Selection Cooperation Networks with ARQ	In this paper, we combine the distributed selection cooperation protocols with ARQ mechanism to develop more powerful cooperative schemes for delay-tolerant wireless networks and analyze their performance from the perspective of diversity multiplexing-delay (D-M-D) tradeoff.	2012
44	ITCM15	An Analysis of the Bidirectional LMS Algorithm over Fast-Fading Channels	We analyze the tracking performance of the bidirectional LMS algorithm by deriving a novel step-size dependent steady-state MSE and optimal step-size expressions over fast frequency-selective time-varying channels.	2012

45	ITCM16	Coded Free-Space Optical Links over Strong Turbulence and Misalignment Fading Channels	This paper investigates the error performance for convolutional coded on-off keying free-space optical systems through symbol by symbol interleaved channels characterized by strong turbulence and/or pointing error effects. We consider several channel types and derive exact analytical expressions for the pair wise error probability.	2011
46	ITCM17	Interference Cancellation and Detection for More than Two Users	In this paper, we extend the scheme to more than 2 users. In other words, we propose a system to achieve interference cancellation and full diversity with low complexity for any number of users. Then, we extend the results to any number of users with any number of transmit and receive antennas.	2011
47	ITCM18	Cooperative Diversity for Free-Space Optical Communications: Transceiver Design and Performance Analysis	In this paper, we investigate the co-operative diversity technique as a candidate solution for combating turbulence induced fading over Free-Space Optical (FSO) links. In particular, a one-relay cooperative diversity scheme is proposed and analyzed for non-coherent FSO communications with intensity modulation and direct detection	2011
48	ITCM19	Single-Relay Co-operative Diversity With Scaled Selection Combining	In this paper a single-relay co-operative diversity system employing the decode-and-forward protocol in Rayleigh fading, a scaled signal-to-noise ratio-based selection combining scheme, which uses a deterministic scale factor for link selection to incorporate the effect of the source-to-relay link, is presented. Its Error probability for binary phase-shift keying is derived in closed-form	2011
49	ITCM20	Space-Time Block Coded Spatial Modulation	A novel multiple-input multiple output (MIMO) transmission scheme, called space-time block coded spatial modulation (STBC-SM), is proposed. It combines spatial modulation (SM) and space-time block coding (STBC) to take advantage of the benefits of both while avoiding their drawbacks.	2011

POWER ELECTRONICS

TECHNOLOGY: MATLAB - POWER ELECTRONICS
DOMAIN: AC-DC CONVERTER

50	ITPW01	A New Single-Phase Single-Stage Three-Level Power Factor Correction AC–DC Converter	In this paper, a new three-level single-stage power factor-corrected ac/dc converter is presented. The boost converter shapes the input line current so that the input current is almost sinusoidal. The proposed voltage -fed Single Stage Power Factor Correction (SSPFC) converter integrates the operation of a boost converter and a three-level dc/dc converter in to one converter.	2012
51	ITPW02	A Low-Power AC–DC Single-Stage Converter With Reduced DC Bus Voltage Variation	A new low-power single-stage ac–dc converter proposed in this paper, operates with a sinusoidal input current and a low primary side dc bus voltage that is much less variable than that found in other single-stage converters. The significant reduction in dc bus voltage variation allows for a reduction in dc bus capacitor size.	2012
52	ITPW03	New Efficient Bridgeless Cuk Rectifiers for PFC Applications	In this proposed converter, the absence of an input diode bridge and the presence of only two semiconductor switches in the current flowing path during each interval of the switching cycle results in less conduction losses. The proposed topologies are designed to work in discontinuous conduction mode (DCM) to achieve almost a unity power factor and low total harmonic distortion of the input current.	2012
53	ITPW04	Modeling and Control of a Three-Phase Four-Switch PWM Voltage -Source Rectifier in d-q Synchronous Frame	This paper introduces a control design approach in rotating d-q frame for the four-switch PWM VSRs. For this purpose, a mathematical model of the four-switch PWM VSR in rotating d-q frame is first derived. Its success is relied on performing a so called "Reduced Park Transformation" on switching functions.	2011
54	ITPW05	A Single-Phase High Power Factor Rectifier, Based on a Two-Quadrant Shunt Active Filter	This paper presents a new technique to improve the input power factor of a single-phase rectifier followed by an inductive filter. It consists in the employment of a two-quadrant active power filter, based on a conventional bidirectional DC-DC converter, connected to the output side of the diode bridge.	2011

TECHNOLOGY: MATLAB - POWER ELECTRONICS DOMAIN: DC- AC CONVERTER				
55	ITPW06	A ZVS Grid-Connected Three-Phase Inverter	This paper proposes a topology of the six-switch three-phase inverter, but with an additional switch by giving a new space vector modulation (SVM) scheme. The inverter realizes zero-voltage switching (ZVS) operation in all switching devices and it overcomes the severe switching losses and high electromagnetic interference problems caused due to anti-parallel diodes. However in the grid-connected application, the inverter can achieve ZVS in all the switches under the load with high power factor.	2012
56	ITPW07	A Safety Enhanced, High Step-Up DC–DC Converter for AC Photovoltaic Module Application	This paper proposes a converter that employs a floating active switch to isolate energy from the PV panel when the ac module is OFF; this particular design protects installers and users from electrical hazards. Without extreme duty ratios and the numerous turns-ratios of a coupled inductor, this converter achieves a high step-up voltage-conversion ratio; the leakage inductor energy of the coupled inductor is efficiently recycled to the load.	2012
57	ITPW08	Single-Phase Z-Source Inverter	This paper proposes a novel single-phase Z-source inverter topology with input and output sharing the same ground. It is simple in structure and only utilizes two switches while keeping the voltage transfer ratio the same as for the full-bridge inverter. One-cycle control is adopted. Highly efficient constant frequency control can be achieved without an accurate model of the converter.	2011
TECHNOLOGY: MATLAB - POWER ELECTRONICS DOMAIN: MULTILEVEL CONVERTERS / INVERTERS				
58	ITPW09	Analysis and Comparison of Three Topologies of the Ladder Multilevel DC/DC Converter	In this paper, three dc/dc ladder multilevel converters are compared. The first one is the classical ladder topology and the two other topologies presented are based on the classical one leading to less losses and other advantages such as low input current ripple, low output voltage ripple and high efficiency.	2012

59	ITPW10	Multilevel Current Waveform Generation Using Inductor Cells and H-Bridge Current-Source Inverter	In this new topology, a basic H-bridge CSI working as a main inverter, generates a multilevel current waveform in co-operation with inductor cells connected in parallel as auxiliary circuits. Each inductor cell is composed of four unidirectional power switches with an inductor across the cell circuit.	2012
60	ITPW11	Diode-Clamped Three Level Inverter Based Battery /Super capacitor Direct Integration Scheme for Renewable Energy Systems	This MLI topology eliminates the need for interfacing dc-dc converters and thus considerably improves the overall system efficiency. The major issue in above systems is the unavoidable imbalance in dc-link voltages.	2011
61	ITPW12	Efficient Sequential Switching Hybrid-Modulation Techniques for Cascaded Multilevel Inverters	This paper presents four different sequential switching hybrid modulation strategies for cascaded multilevel inverters. The main characteristic of these modulations are the reduction of switching losses with good harmonic performance balanced power loss dissipation among the devices with in a cell.	2011
TECHNOLOGY: MATLAB - POWER ELECTRONICS DOMAIN: DC-DC CONVERTERS				
62	ITPW13	Novel Non-isolated High-Voltage Gain DC–DC Converters Based on 3SSC and VMC	This paper introduces a new family of dc–dc converters based on the three-state switching cell and voltage multiplier cells. The analyzed converter can be applied in uninterruptible power supplies, electrical fork-lift, audio amplifiers and fuel cell systems and is also adequate to operate as a high-gain boost stage with cascaded inverters in renewable energy systems.	2012
63	ITPW14	Analysis and Design of a Zero-Voltage-Switching and Zero-Current-Switching Interleaved Boost Converter	This novel interleaved boost converter with ZV-ZCS topology not only decreases the current stress of the main circuit devices but also reduces the ripple of the input current and output voltage. The main switch achieves the characteristics of ZVS and ZCS to reduce the switching loss thereby improving the efficiency.	2012

64	ITPW15	Feed-Forward Compensator of Operating Frequency for APWM HB Flyback Converter	This feed forward frequency compensator can properly change the converter's operating frequency to reduce the conduction losses according to the variation of the input voltage satisfying the ZCS condition of the output rectifiers.	2012
65	ITPW16	Performance of a High-Efficiency Switched-Capacitor-Based Resonant Converter With Phase-Shift Control	This paper presents operating performance of a switched-capacitor-based resonant converter (SCRC) using a phase-shift control method. The proposed phase-shift control realizes zero-voltage switching operation, and thus achieves high efficiency.	2011
TECHNOLOGY: MATLAB-POWER ELECTRONICS DOMAIN: AC-AC CONVERTER				
66	ITPW17	High Efficiency AC–AC Power Electronic Converter Applied to Domestic Induction Heating	The proposed converter topology, based on t he half-bridge series resonant inverter, uses only two diodes to rectify the mains voltage. This converter operates by zero-voltage switching technique during both switch-on and switch-off transitions. Moreover this topology doubles the output voltage, and therefore, the current in the load is reduced for the same output power.	2012
67	ITPW18	Single-Phase to Three-Phase Power Converters: State of the Art	In this proposed topology single-phase to three-phase ac–ac direct conversion configurations and those which aim to reduce the dc-link voltage fluctuation are included. This topology improves the power factor, decreases the conduction and switching losses, thereby increasing the efficiency of the converter.	2012
68	ITPW19	A Modified Single-Phase Quasi - Z-Source AC-AC Converter	In this paper, a converter without input or output filters is presented. This design inherits all of the advantages of the traditional Z-source converters; it has buck-boost capabilities and can maintain or reverse the output phase angle all the while sharing the same ground.	2012
TECHNOLOGY: MATLAB - POWER ELECTRONICS-ONLY SIMULATION DOMAIN: FUZZY LOGIC-NEURAL NETWORK				
69	ITPW20	Adaptive Fuzzy-Neural-Network Design for Voltage Tracking Control of a DC–DC Boost Converter	In this study, AFNNC scheme is designed for the voltage tracking control of a conventional dc–dc boost converter. A total sliding-mode control (TSMC) strategy without reaching phase in the conventional SMC is developed for enhancing system robustness during the transient response of the voltage control thereby increasing the efficiency of the converter.	2012

TECHNOLOGY: MATLAB-POWER ELECTRONICS-ONLY SIMULATION DOMAIN: POWER SYSTEMS				
70	ITPW21	A DSTATCOM Topology With Reduced DC-Link Voltage Rating for Load Compensation With Non-stiff Source	In this paper, a new topology for STATCOM applications with non-stiff source is proposed. The proposed topology enables D-STATCOM to have a reduced dc-link voltage without compromising the compensation capability. It uses a series capacitor along with the interfacing inductor and a shunt filter capacitor. The switching losses is also reduced leading to high efficiency.	2012
71	ITPW22	Control of Parallel Multiple Converters, for Direct-Drive Permanent-Magnet Wind Power Generation Systems	This paper proposes control strategies for megawatt level direct-drive PMSG wind generation systems. In this paper a circulating current model is derived and analyzed. The controllers are designed to restrain reactive power circulation and beat frequency circulation currents caused by discontinuous space vector modulation.	2012
72	ITPW23	Advanced Control of Series Voltage Compensation to Enhance Wind Turbine Ride Through	This paper presents the characteristics of ride-through behavior of doubly fed induction generator (DFIG) using phasor analysis. A new control scheme is then described which allows relatively low-energy ratings in the series compensator. The new controller enables the DFIG to provide the reactive power required for system voltage recovery during grid fault.	2012
73	ITPW24	Neutral-Point Potential Balancing of Three-Level Inverters in Direct -Driven Wind Energy Conversion System	In this paper, the topology of a boost three-level (TL) chopper on the front of a TL diode-clamped inverter is analyzed. The switch-signal phase delay control (SSPDC) is proposed for NP potential balancing of TL inverter based on the characteristics of boost TL chopper.	2011
TECHNOLOGY: INDUSTRIAL BASED POWER ELECTRONICS – ONLY HARDWARE DOMAIN: ELECTRICAL				
74	NIPW01	Automatic induction motor starter with programmable timer	The requirement of a sensitive protective device absolutely essential to avoid burning of induction motors under such conditions .The circuit of an automatic starter, incorporating the important features is described. It is meant to be used in conjunction with a DOL starter in order to improve the efficiency of induction motor	

75	NIPW02	Power factor correction in AC IGBT drives used for dragline applications.	IGBT consists of following features such as Inherent Regeneration; Power Factor Can be controlled leading and lagging; Low harmonics (3,5,7,9,11th) all these results in enabling for dragline applications.
76	NIPW03	Triac Based Light Controller	This project is intended for controlling mains powered disco lighting. Triacs involved in this project seemed like a more sensible solution as they react quicker and are totally silent as they contain no mechanical parts.
77	NIPW04	Fabrication of an automatic battery charger using SCR	The objectives of this paper are an automatic battery charger with and without using trickle charging arrangement using SCR.
78	NIPW05	Design of thyristor controlled series capacitor for high voltage controllability and flexibility.	This FACTS device increases the flexibility and the power handling capability of the power system by using anti-parallel TRIACs. The capacitor connected in shunt provides a smoothly variable series capacitive reactance and inductive reactance by an series inductor. This results in the practical applications like Sub Synchronous Resonance mitigation and Stability improvement.
79	NIPW06	Design and implementation of Intelligent inverters for CFL lamps	These inverters play a vital role especially in rural areas. A rechargeable 12V battery is used to store energy during power availability. The backup time depends on the battery ampere hour rating.
80	NIPW07	An Optically Isolated HV-IGBT Based Mega-Watt Cascade Inverter Building Block for DER Applications	The motivation of this project is of using Optical Sensor Technologies + High Power Systems forms a tremendous advantages and the Commercial Point of View: "Dual Use" for both Power Electronics and Utility Power Industries (i.e. Potential Markets are Large)
81	NIPW08	High efficient regulation method for a zero current and zero voltage current fed push-pull converter for SMPS applications	The novelty of the presented converter is that regulation is achieved without affecting the zero-voltage and zero-current switching in any working conditions. Small- and large-signal models of the converter have been developed and a low-power prototype has been implemented for SMPS applications.
82	NIPW09	Current Control for High-Dynamic High-Power Multiphase Buck Converter	This project presents a current control for high-dynamic, high-power multiphase buck Converters. The control proposed is based on the synchronization of zero-crossing current ripples with a time reference pattern. ThisControl forces a correct interleaving and is capable of responding, with a reduced transitory time, to major changes in current reference and load voltage.

83	NIPW10	Load Current Based Analog MPPT Controller For PV Solar Systems	This project presents an analog Maximum Power Point Tracking (MPPT) controller for a Photovoltaic (PV) solar system that utilizes the load current to achieve maximum output power from the solar panel. Compared to the existing MPPT controller circuitry which requires multiplication of the sensed PV panel voltage and current to yield panel power, the cost and size of the proposed circuit are reduced.
84	NIPW11	Analysis and Design of a Bidirectional Isolated DC–DC Converter for Fuel Cells and Super-capacitors Hybrid System	The proposed topology minimizes the number of switches by using two high-frequency transformers that combine a half-bridge circuit and a full-bridge circuit together on the primary side. The voltage doubler circuit is employed on the secondary side. The parasitic capacitance of the switches is used for zero voltage switching (ZVS) with phase-shift and duty-cycle modulation.
85	NIPW12	Level-Shifting Multiple-Input Switched-Capacitor Voltage Copier	In this paper, a level-shifting voltage-copier circuitry is introduced to convert one or two input voltage levels to eight voltage levels. The voltage copier consists of five kinds of conversion circuits. Each circuit includes only six to seven electronic components, which can ensure the simplicity and reliability of the design.
86	NIPW13	High Step-Up Converter Based on Charge Pump and Boost Converter	In this concept, the high step up converter boost a low voltage from a renewable energy source to high voltage there by increasing the efficiency of the pump.
87	NIPW14	An innovative integrated topology for grid connected power system	A grid-connected photovoltaic (PV) power system with high voltage gain is presented. For a typical PV array, the output voltage is relatively low, and a high voltage gain is needed. This design employs a ZVT-interleaved boost converter with winding-coupled inductors and active-clamp circuits which can boost a low voltage of the PV array up to a high dc-bus voltage.
88	NIPW15	High density EMI filter for DC fed motor drives	This paper presents strategies to reduce both differential-mode (DM) and common-mode (CM) noise using a passive filter in a dc-fed motor drive. This design shows reduced filter size and good filtering performance when compared with standard filters at both low and high frequencies.

VLSI

TECHNOLOGY: VLSI

DOMAIN: TESTING

1	ITVL01	Accumulator Based 3-Weight Pattern Generation	The proposed scheme generates set Pattern Generationof patterns with weights 0, 0.5, and 1. This scheme can be efficiently utilized to drive down the hardware of BIST pattern generation. Comparisons with previously presented schemes indicate that the proposed scheme compares Favorably with respect to the required hardware.	2012
2	ITVL02	An On-Chip Delay Measurement Technique Using Signature Registers for Small-Delay Defect Detection	This paper presents a delay measurement technique using signature analysis, and a scan design for the proposed delay measurement technique to detect small-delay defects. The proposed measurement technique measures the delay of the explicitly sensitized paths with the resolution of the on-chip variable clock generator.	2012
3	ITVL03	Period Extension and Randomness Enhancement Using High-Throughput Reseeding-Mixing PRNG	In this paper we present a new reseeding-mixing method to extend the system period length and to enhance the statistical properties of a chaos-based logistic map pseudo random number generator (PRNG). The reseeding method removes the short periods of the digitized logistic map and the mixing method extends the system period length to 2^{256} by "XOring" with a DX generator.	2012
4	ITVL04	Single Cycle Access Structure for Logic Test	Eliminates the peak power consumption problem of conventional shift-based scan chains and reduces the activity during shift and capture cycles. This leads to more realistic circuit behavior during stuck-at and at-speed tests.	2012
5	ITVL05	A Lightweight High-Performance Fault Detection Scheme for the Advanced Encryption Standard Using Composite Fields	In the proposed approach, the composite field S-box and inverse S-box are divided into blocks and the predicted parities of these blocks are obtained. We have found the optimum solutions for the least over-head parity-based fault detection structures	2011

TECHNOLOGY: VLSI DOMAIN: LOW POWER				
06	ITVL06	Low-Power and Area-Efficient Carry Select Adder	In this paper we uses a simple and efficient gate-level modification to significantly reduce the area and power of the CSLA. Architecture have been developed and compared with the regular SQRT CSLA architecture.	2012
07	ITVL07	A Low-Power Single-Phase Clock Multiband Flexible Divider	frequency synthesizers is proposed based on pulse-swallow topology. The multiband divider consists of a proposed wideband multi modulus 32/33/47/48 prescaler and an improved bit-cell for swallow (S) counter.	2012
08	ITVL08	On Modulo 2^n+1 Adder Design	The first one is built around a sparse carry Computation unit that computes only some of the carries of the modulo 2^n+1 addition. The second architecture unifies the design of modulo $2^n \pm 1$ adders.	2012
09	ITVL09	Measurement and Evaluation of Power Analysis Attacks on Asynchronous S-Box	In this paper demonstrates the hardware implementation of a recently proposed low -power asynchronous Advance Encryption Standard substitution box (S-Box) design that is capable of being resistant to side channel attack	2012
10	ITVL10	Mapping Multi-Domain Applications onto Coarse-Grained Reconfigurable Architectures	In this paper introduces approaches to mapping applications onto CGRAs supporting both integer and floating point arithmetic. The applications mapped on a CGRA show up to 120 times performance improvement compared to software implementations.	2011
TECHNOLOGY: VLSI DOMAIN: ERROR CORRECTION & DETECTION				
11	ITVL11	Design of an Error Detection and Data Recovery Architecture for Motion Estimation Testing Application	In this paper we are presents an error detection and data recovery (EDDR) design, based on the residue-and-quotient (RQ) code, to embed into ME for video coding testing applications	2012
12	ITVL12	High-Throughput Interpolator Architecture for Low-Complexity Chase Decoding of Rscodes	In this paper, high-throughput interpolator architecture for soft-decision decoding of Reed–Solomon (RS) codes based on low-complexity chase (LCC) decoding is presented	2012

13	ITVL13	Construction of Optimum Composite Field Architecture for Compact High-Throughput AES S-Boxes	In this work, we derive three novel composite field arithmetic (CFA) Advanced composite field Encryption Standard (AES) S-boxes of the field GF(2))). The best construction is selected after a sequence of algorithmic and architectural optimization processes.	2012
14	ITVL14	Reduced-Complexity LCC Reed –Solomon Decoder Based on Unified Syndrome Computation	In this paper, a unified syndrome computation algorithm and the corresponding architecture are proposed. Cooperating with the KES in the reduced inversion-free Berlekamp-Messy algorithm, the reduced complexity	2012
15	ITVL15	New Architectural Design of CA-Based Codec	Cellular automata (CA) have already established its novelty for bits and bytes error correcting codes (ECC). The current work identifies weakness and limitation of existing CA-based byte ECC and proposes an improved CA-based double byte ECC which overcomes the identified weakness.	2010
TECHNOLOGY: VLSI				
DOMAIN: AREA EFFICIENT				
16	ITVL16	A High-Accuracy Adaptive Conditional-Probability Estimator for Fixed-Width Booth Multipliers	In this paper, a single compensation formula of adaptive conditional-probability estimator (ACPE) applied to fixed-width Booth multiplier is proposed. Based on the conditional- probability theory, the ACPE can be easily applied to large length Booth multipliers	2012
17	ITVL17	Low-Complexity Multiplier for GF(2m) Based on All-One Polynomials	This paper presents an area-time-efficient systolic structure for multiplication over based on all-one polynomial (AOP). We have used a cut-set retiming to reduce the duration of the critical-path to one XOR gate delay	2012
18	ITVL18	A Probabilistic Estimation Bias Circuit for Fixed-Width Booth Multiplier and Its DCT Applications	The proposed PEB circuit provides a smaller area and a lower truncation error compared with existing works. The PEB formula is derived from the probabilistic analysis in the partial product array after the Booth encoder.	2011

19	ITVL19	High-Accuracy Fixed-Width Modified Booth Multipliers for Lossy Applications	Reduce the truncation error, we first slightly modify the partial product matrix of Booth multiplication and then derive an effective error compensation function the proposed error compensation circuit can achieve a tiny mean error and a significant reduction in mean-square error.	2011
20	ITVL20	LUT Optimization for Memory-Based Computation	In this paper, we present a different form of APC and a modified OMS scheme, in order to combine them for efficient memory-based multiplication. The proposed combined approach provides a reduction in LUT size to one-fourth of the conventional LUT.	2010
21	ITVL21	New Approach to Look-Up-Table Design and Memory-Based Realization of FIR Digital Filter	he memory elements store all the possible values of products of the filter coefficients could be an area-efficient alternative to DA-based design of FIR filter with the same throughput of implementation.	2010
TECHNOLOGY: VLSI **DOMAIN: VLSI WITH MATLAB**				
22	ITVL22	A High Performance Video Transform Engine by Using Space-Time Scheduling Strategy	The proposed spatial scheduling strategy includes the ability to choose the distributed arithmetic (DA)-precision bit length, a hardware sharing architecture that reduces the hardware cost, and the proposed time scheduling strategy.	2012
23	ITVL23	Precision-Aware Self-Quantizing Hardware Architectures for the Discrete Wavelet Transform	This paper presents designs for both bit-parallel (BP) and digit-serial (DS) precision-optimized implementations of the discrete wavelet transform (DWT), with specific consideration given to the impact of depth on the overall computational accuracy.	2012
24	ITVL24	Area-Efficient Parallel FIR Digital Filter Structures for Symmetric Convolutions Based on Fast FIR Algorithm	The proposed parallel FIR structures exploit the inherent nature of symmetric coefficients reducing half the number of multipliers in sub filter section at the expense of additional adders in preprocessing and post processing blocks.	2012
25	ITVL25	Quantization Noise Suppression in Fractional-PLLs Utilizing Glitch-Free Phase Switching Multi-Modulus N- Frequency Divider	The proposed phase switching multi-modulus frequency divider (PS-MMFD) utilizes a novel glitch-free phase switching (PS) divide-by-0.5/1/1.5/2 cell to reduce the frequency division step to 0.5.	2012

26	ITVL26	High Throughput DA-Based DCT With High Accuracy Error-Compensated Adder Tree	In this paper we proposed error-compensated adder-tree (ECAT) to deal with the truncation errors and to achieve low-error and high-throughput discrete cosine transform (DCT)	2011
TECHNOLOGY: VLSI **DOMAIN: APPLICATION**				
27	ITVL27	An Efficient Architecture Design for VGA Monitor Controller	In this paper, we present the design and implementation of efficient hardware architecture for VGA monitor controllers based on FPGA technology. The design is compatible with PLB bus and has a high potential to be used in Xilinx FPGA-based systems	2011
28	ITVL28	The Communication Interface Design of AT89C51 Preparation Robot Based on Serial	In this paper we present a MAX232 chip using AT89C51 Microcontroller to RS-232 Serial Communication, and RS- 232 communication interface design can give about preparation of robot arm using FPGA.	2011

EMBEDDED
ROBOTICS

TECHNOLOGY: EMBEDDED

DOMAIN: ROBOTICS

S.NO	PROJECT CODE	PROJECT TITLES	DESCRIPTION	YEAR
1.	ITROB01	Smart Host Microcontroller for Optimal Battery Charging in a Solar-Powered Robotic Vehicle	This Paper proposes a solar power based robot vehicle. It absorbs energy from solar and the energy will be stored in battery. The maximum power will be generated using solar tracking mechanism.	2012
2.	ITROB02	Multiple Working Mode Control of Door-Opening With a Mobile Modular and Reconfigurable Robot	In this paper robot is used for household applications. It automatically does the operations based on the command received from the user.	2012
3.	ITROB03	Robust Railway Crack Detection Scheme (RRCDS) Using LED-LDR Assembly	This method proposes led and Ldr based crack detection robot using GPS and wireless Network location will also be traced.	2012
4.	ITROB04	Modeling and Control of a Snake -Like Robot Using the Screw-drive Mechanism	In this paper we implement the snake robot. Using this model we can collect data from different places.	2012
5.	ITROB05	Design of A Hexapod Robot	This paper introduces hexapod robot. This robot will move in different terrain. So the data collection and path identification is easy.	2012
6.	ITROB06	Wireless Underwater Mobile Robot System Based on Zigbee	In this method the underwater robot is designed for collecting data's from underwater and it automatically sends to the control section.	2012
7.	ITROB07	Self-recognition of Vehicle Position Using UHF Passive RFID Tags	In this paper proposes the position of the robot will automatically estimate. Without human interaction it will navigate from one place to another place.	2012
8.	ITROB08	An Autonomous Robot Based on a Wheelchair	This robot is based on wheelchair. It moves from one place another place. The sensor interfaced with this robot finds obstacles means using GPS the location will display.	2012

9.	ITROB09	Autonomous Navigation Robot For Landmine Detection Applications	This robot is designed for landmine applications. The detection sensor is fixed in robot. If it detects means send alert information to the control section.	2012
10.	ITROB10	Wireless Vision-Based Stabilization of Indoor Micro-helicopter	This paper introduces small size helicopter for spy applications. Using wireless camera we can identify the exact location.	2012
11.	ITROB11	Robot Navigation System with RFID and Sensors	In this paper proposes RFID based automatic position estimation robot. Using ultrasonic sensors robot is navigated in fixed path.	2012
12.	ITROB12	Multisensor Fusion and Integration: A Review on Approaches and Its Applications in Mechatronics	This method introduces environmental monitoring using robot. Using wireless camera we can identify the exact location.	2012
13.	ITROB13	An Online Stair-Climbing Control Method for a Transformable Tracked Robot	This paper proposes stair climbing robot for industrial purpose. So the manual power is fully reduced. From online we can control the robot.	2012
14.	ITROB14	An Energy Efficient Knee Locking Mechanism for a Dynamically Walking Robot	This paper proposes walking robot by innovative method. In this knee locking robot mechanism is designed to avoid falling of robot.	2011
15.	ITROB15	Solar Power System for Experimental Unmanned Aerial Vehicle (UAV); Design and Fabrication	In this paper, solar cells were used to increase the endurance of the aircraft. Obtaining this goal, an electrical Circuit was developed to measure the output power of the batteries of the aircraft during the flight.	2011
16.	ITROB16	Construction of an Obstacle Map and its Real-time Implementation on an Unmanned Ground Vehicle	The objective of this paper is to develop and implement a UGV control system utilizing embedded micro-controllers. This control system must enable the UGV to navigate using GPS to the waypoints while avoiding obstacles discovered in its path.	2011
17.	ITROB17	A Hierarchical Algorithm for Indoor Mobile Robot Localization Using RFID Sensor Fusion	This paper has addressed an RFID based localization scheme for mobile robots which uses ultrasonic sensor for obstacle avoidance. The proposed system was able to obtain the position of the mobile robot without any constraint from the environment using RFID technology.	2011

18.	ITROB18	Imirok: Real-Time Imitative Robotic Arm Control for Home Robot Applications	In this paper, we have presented the design implementation, and Evaluation of an imitative robotic arm control system using MATLAB and embedded system.	2011
19.	ITROB19	Automated Voice based Home Navigation System for the Elderly and the Physically Challenged	In this paper, we propose an Intelligent Home Navigation System (IHNS) which comprises of a wheelchair and voice recognition module. It can be used by an elderly or physically challenged person to move inside the home without any difficulty.	2011
20.	ITROB20	Hazardous Gas Detecting Method Applied in Coal Mine Detection Robot	Coal Mine Detection Robot is required to detect hazardous gas. The explorative robot uses improved infrared ray absorption prospecting instrument to detect CO and temperature of environmental group data, it has strong integration and micro-miniaturization.	2011
21.	ITROB21	The Application of Adaptive PID Control in the Spray Robot	The objective of this paper is to control the robotic spray mechanism using a PID controller for agricultural and green house maintenance. Here, we develop a PID control using Microcontroller.	2011
22.	ITROB22	Weighing System of Fruit-Transportation Gyro car Based on ARM	The gyro car uses weight sensor to measure the load. It moves automatically to the destination when the measured load reaches the set load.	2011
23.	ITROB23	Zigbee based Wireless Sensor Networks for Service Robot Intelligent Space	The Zigbee based wireless sensor networks has been implemented in our service robot intelligent space successfully, which greatly improve the perception of service Robot. Here, the robot monitors and controls the devices according to the received data from the sensor networks.	2011
24.	ITROB24	Design and Implementation of a Mini-Size Search Robot	This paper represents a design and implementation of a mini-size search robot which is mainly used to search the chassis of vehicle and some narrow areas of city for detection of dangerous materials.	2010
25.	ITROB25	Situation-Driven Control of a Robotic Wheelchair to Follow a Caregiver	We have proposed a robotic wheelchair that can move with a caregiver collaboratively depending on the situation. In an Open space, it moves with the caregiver side by side using MATLAB. This enables easy communication between the wheelchair user and the caregiver.	2010

26.	ITROB26	Indoor autonomous hovering control for a small unmanned coaxial helicopter	This paper constructs an indoor Autonomous flight control platform for a small coaxial helicopter, which is convenient for data collection and monitoring in remote area.	2010
27.	ITROB27	Design of a Wall-Climbing Robot with Passive Suction Cups	In this paper, a wall-climbing robot which attaches to a Wall by passive suction cups has been proposed. It has motors, which not only rotates crawler belts but also can be used to attach and detach a suction cup from a surface.	2010
28.	ITROB28	Design and Implementation of Multi-sensor Based Autonomous Minesweeping Robot	The small handful of landmines that remain undiscovered, can actually lead to an increase in civilian mine casualties. Wireless connection is established between the local controller on the robot and general controller that is installed at the outside of the minefield to handle the whole navigation procedure.	2010
29.	ITROB29	Autonomous Agricultural Robot and Its Row Guidance	It is used to guide a robot platform which is designed independently to drive through the row crops in a field according to the design concept of open architecture.	2010
TECHNOLOGY: EMBEDDED **DOMAIN : NON-IEEE - ROBOTICS**				
30.	NIROB01	Head Motion Controlled Wheel chair	The objective of this project is to design a power wheel chair with a novel control system for quadriplegics with head and neck mobility.	
31.	NIROB02	7th Sense, A Multipurpose Robot for Military	This project's aim is to provide a robotic system that can combat in wars and other military purposes. Also we are going to control the robot from remote location. can combat in wars and other military purposes. Also we are going to control the robot from remote location.	
32.	NIROB03	Wireless Image Communication with System for Fire Fighting Robots	Fire-fighting robots can be useful for extinguishing a fire, and they are controlled by remote operators. In order to help these operators wireless	
33.	NIROB04	MATLAB based intruder Detection and shooting Robot	This project aim is to provide security systems. Robotic arm controlled using MATLAB is implemented.	
34.	NIROB05	Automatic navigation robot for industrial applications based on RFID Technology	This project is designed by a robot system which is automatic for verifying the employee data in industries	

35.	NIROB06	Touch screen based wheelchair robot for physically challenged people	This project aim is to control the robot system using Touch screen technology.	
36.	NIROB07	Versatility Technique for Patient Monitoring System	This project aim is to monitor the patient parameter such as ECG, temperature by using individual sensors	
37.	NIROB08	Human identification robot in forest area	This project is designed to identify the human interference in the forest area	
38.	NIROB09	Cartesian robot for the purpose of the pick and place	This project is designed with robot system which controlled through mobile using DTMF for industry purpose.	
39.	NIROB10	Rf Based Robot Control Using PIR Sensor For Defense Force.	The objective of this project is to design a robot to detect the humans in homes or any other security purpose in offices and industry.	
40.	NIROB11	Identification of cracks in tunnel using tunnel robot	This Robot has crack sensor which could be able to detect the Crack in the tunnel	
41.	NIROB12	Lift controller using Micro controller	This project is designed for lift mechanism controlling through keypad using micro controller	
42.	NIROB13	MEMS Accelerometer controller Wheel chair	This project has designed with robot mechanism control using MEMS accelerometer	
43.	NIROB14	4-wire resistive Touch screen controlled Robot	The project is designed to control a robot system using the resistive type touch screen	
44.	NIROB15	Micro controller based weather forecasting robot using Gsm	This project is designed to monitor the environment status using the sensors placed in robot system	

ANDROID

TECHNOLOGY: EMBEDDED

DOMAIN : NON-IEEE- ANDROID

45.	ITANR01	Providing Accident Detection in Vehicular Networks Through OBD-II Devices and Android-based Smart-phones	This paper describes the automatic intimation of accidents in the roadways via mobile phones which has the android OS. This system will use the internet for monitoring instantly.	2012
46.	ITANR02	Remotely Controlled Communication and Control System for Limited Mobility Individuals	The main objective of the project is to make the system very easier to control the applications by reducing the mobility for the patients. The controlling will be done from the wheel chair itself.	2012

47.	ITANR03	A Smartphone-in-the-Loop Active State-of-Charge Manager for Electric Vehicles	This paper proposes a novel, spatially distributed and hierarchical control architecture that is capable of regulating the battery state of charge by imposing a desired discharge rate.	2012
48.	ITANR04	A Wireless Sensory Feedback Device for Real-Time Gait Feedback and Training	The main objective of this paper is to intimate the walking status of the patient by using the wearable sensor. The intimation will be received in the mobile phone.	2012
49.	ITANR05	Evaluation of a Smartphone Platform as a Wireless Interface Between Tongue Drive System and Electric-Powered Wheelchairs	This paper describes the controlling of the wheel chair by using tongue. The mobile phone is the interfacing device between the controlling section and the wheel chair section.	2012

AUTOMATION

TECHNOLOGY: EMBEDDED

DOMAIN : AUTOMATION

50.	ITAM01	A Multiple Inductive Loop Vehicle Detection System for Heterogeneous and Lane-Less Traffic	The loop sensor proposed in this paper detects large as well as small vehicles occupying any available space in the roadway, which is the main requirement for sensing heterogeneous and lane-less traffic.	2012
51.	ITAM02	Water-Cluster-Detecting Breath Sensor and Applications in Cars for Detecting Drunk or Drowsy Driving	This paper presents to identify the driver drowsy and drunk using sensors, if it detects means it will alert to the driver and intimate to the control section.	2012
52.	ITAM03	Real-Time Combinational Optmization for Elevator group Dispatching	This paper proposes a monitoring and balancing the elevator and properly dispatch the people	2012
53.	ITAM04	The House Intelligent Switch Control Network based on CAN BUS	In this paper we will control the home appliances using can protocol. Switching and human motion detection both methods will be use.	2012
54.	ITAM05	An Effective Pedestrian Detection Method For Driver Assistance System	In this paper using sensor and image processing technique driver can easily identify the pedestrian near the road. So the accidents will reduce.	2012

55.	ITAM06	A Reconfigurable Snake Robot Based on CAN-Bus	This paper presents can bus based snake robot. Sensors fixed to the robot. So it easily collects the data and update in pc.	2012
56.	ITAM07	The Design of the Steering Wheel with Anti-fatigue Driving for Vehicles Based on Pattern Recognition	This paper presents a driver fatigue monitor & warning. Gps is used for navigate the position of the vehicle.	2012
57.	ITAM08	Design of Distributed Greenhouse Big Awning Monitoring System Based on Field-bus	Using this method we will monitor and control the greenhouse parameters using can protocol. The sensor collects data it above threshold means it automatically switches on the corresponding devices.	2012
58.	ITAM09	A New Method for Detecting Leaks in Underground Water Pipelines	In this method we can identify the leaks in underground water pipelines. This setup fix in to the pipeline means it identifies the leaks and intimate to the control section	2012
59.	ITAM10	Multiple-Target Tracking for Intelligent Headlights Control	This paper introduces MATLAB based headlight control. In image processing technique it will identify the object and embedded part control the headlight.	2012
60.	ITAM11	Hand-Motion Crane Control Using Radio-Frequency Real-Time Location Systems	This paper presents crane control using hand motion. Using RF technology we can control wirelessly.	2012
61.	ITAM12	Ethernet Enabled Digital I/O Control in Embedded Systems	In this paper presents Ethernet interface. The sensor data will update Ethernet means we can see anywhere and know the status.	2012
62.	ITAM13	Study on the Embedded CAN Bus Control System in the Vehicle	This paper introduces ARM and can bus base automatic vehicle control system. The parameters monitored	2012
63.	ITAM14	On the Impact of Virtual Traffic Lights on Carbon Emissions Mitigation	This paper presents reduce the carbon emissions near the traffic signal. The first incoming vehicle will send the information about traffic signal to all other vehicles.	2012
64.	ITAM15	Indoor Positioning System Using Ultrasonic	This paper proposes an ultrasonic based object location identification using RF communication position will displayed in PC	2011
65.	ITAM16	A Thermally Actuated Microelectromechanical (MEMS) Device for Measuring Viscosity	Changes in oil viscosity in vehicles result in major breakdowns and repairs. The proposed MEMS device is able to measure the viscosity variation of heated motor oil by the change in natural vibration frequency in the oil.	2011

66.	ITAM17	Implementation of CAN bus in an autonomous All-Terrain Vehicle	This paper describes about implementing the CAN bus on Automated vehicles. The proposed consists of multiple node of CAN bus to control & monitor.	2011
67.	ITAM18	Measurement and Control System of Soil Moisture of Large Green house Group Based on Double CAN Bus	The measurement and control system of soil moisture of large greenhouse group based on double CAN bus is introduced in this paper. According to the soil moisture level of various nodes the water is fed to the field using motor.	2011
68.	ITAM19	Research of Roots Flow Meter Based on ARM Cortex-M3	This paper introduces an intelligent roots flow meter to measure the gas flow in industries. It uses temperature and pressure sensors to measure gas flow.	2011
69.	ITAM20	The intelligent embedded control warning system for car reversing	This research tries to design a set of embedded intelligent car backup warning system so Promote the safety of the walkers or the other drivers on the Road. It uses ultrasonic & light sensor to detect the rear vehicles & pedestrians. A warning lamp is used.	2011
70.	ITAM21	Combined Capacitive and Ultrasonic Distance Measurement for Automotive Applications	For the safety applications, the Electronic Control Unit (ECU) of an automotive requires accurate information about size and position of an approaching object. A capacitive and ultrasonic sensor was used to measure the size and position of an obstacle.	2011
71.	ITAM22	Eye Tracking based Driver Fatigue Monitoring and Warning System	This system uses MATLAB based eye movement and measures steering gripping pressure using grip sensor to detect the fatigue state of the driver. The microcontroller warns the driver when he is in fatigue state to prevent accident.	2011
72.	ITAM23	Temperature gathering and Fuzzy control system of electric furnace based on the ARM	An electric furnace temperature is measured and controlled using ARM processor. The system is controlled based on the fuzzy control, which can make the system more accurate and Quickly.	2011
73.	ITAM24	A Hybrid Wired/Wireless Networking Infrastructure for Greenhouse Management	This paper has presented a communication system for the Monitoring and control of greenhouses. Multi protocol system based on Zigbee and CAN were used to monitor and control the greenhouses.	2011

TECHNOLOGY: EMBEDDED DOMAIN : NON-IEEE- AUTOMATION			
74.	NIAM01	Ration Card Distribution System.	This project is designed for automatic process to distribute the consumer goods using RFID technology
75.	NIAM02	Touch screen based home automation	This project is designed to control the home devices using Touch screen technique
76.	NIAM03	Touch screen based vehicle driving system	This project is designed to control the robot system through Touch screen by the user
77.	NIAM04	Water scheduling for municipalities using RTC	This is an automatic system used to schedule the Water distribution in a particular time through RTC
78.	NIAM05	Automatic Dam Shutter Control based on Microcontroller	This project is designed to control the Dam shutter automatically based on the water level in Dam
79.	NIAM06	Automatic Irrigation Water Supply Monitoring And Control System	This project is automatic system designed to control the water supply in the irrigation fields
80.	NIAM07	Automatic Vehicle Starter System Based Alcohol Breath Analyzer \Sensing	This project is designed to control the vehicle automatically using alcohol sensor which is detected while breathing
81.	NIAM08	Petrol Bunk Automation Using Smartcard	This project is designed to maintain a automatic process of Petrol distribution using smartcard for the consumer
82.	NIAM09	Solar Operated Spray Pump	This project is designed based on Solar energy which used to operate a spray pump for agriculture or home purpose
83.	NIAM10	Micro Controller Based Wireless Home Automation	This project is designed to control the accident in home which intimated through alarm using RF technology
84.	NIAM11	Apartment automation monitoring and management system.	This project is designed for monitoring the apartment through automatic process using sensors
85.	NIAM12	Design and development of touch screen based ticket vending machine	This project is designed to collect ticket using touch screen technique which interfaced with the microcontroller
86.	NIAM13	Green House Monitoring and Automation	This project is an automatic system using sensor to monitor a agriculture area
87.	NIAM14	Automatic Railway Gate Control With Voice Announcement	This project is a automatic process to control the railway gate using IR sensor during the train arrival
88.	NIAM15	Intelligent banking machine for Physically Impaired	This project is a automatic machine useful for physically challenged people based on touch screen technique.

WIRELESS

TECHNOLOGY: EMBEDDED

DOMAIN : WIRELESS

89.	ITWI01	Building Lighting Automation through the Integration of DALI with Wireless Sensor Networks	This paper explains the developed system for building automation protocols. This work focuses on the development of a prototype to be used in a wireless sensor network (WSN) which Integrates DALI protocol to monitor heating, Ventilation and air conditioning.	2012
90.	ITWI02	Ship Detection with Wireless Sensor Networks	This paper presents an idea to detect the ship using three-axis accelerometers which is placed at the sea surface. Depends upon the wave oscillation created during ship arrival the accelerometer will detect it.	2012
91.	ITWI03	Wireless Sensor Network Based Home Monitoring System for Wellness Determination of Elderly	Here the system function based on the usage data of electrical and Non-electrical appliances within a home by the elderly persons. The current sensor measure the current values consumed and transmitting the data in wireless ZIGBEE network.	2012
92.	ITWI04	A Wireless Surveillance and Safety System for Mine Workers based on Zigbee	In this paper the basic parameters of the Mine like temperature, Abnormal gases, are monitored and intimation is transmitted in wireless mode to the Monitoring section and also gives intimation in mine in the voice format.	2012
93.	ITWI05	Design a wireless capacitive sensor detection system with power line communication for liquid volume of intravenous drip measurement	In this system the level of drip is going to be determined by fixing capacitive sensor along the surface of the drip bag and abnormal status is transmitted to other section using Power line communication (PLC) medium.	2012
94.	ITWI06	Low Cost Weather Station with Remote Control	In this paper the weather station parameters are monitored and depend upon the status the home devices are controlled.	2012
95.	ITWI07	Cloud Controlled Intrusion Detection and Burglary Prevention Stratagems in Home Automation Systems	In this paper the home automation is performed by detecting the intruder using camera and the status is uploaded in internet and sends as message. The alert devices are activated from internet.	2012

96.	ITWI08	Energy-Aware Pipeline Monitoring System Using Piezoelectric Sensor	In this paper the pipeline damage is detected by measuring impedance with PE sensor. And transmitted in wireless to Monitoring section.	2012
97.	ITWI09	Identification of Missing Objects with Group Coding of RF tags	In shipping purposes the missing objects and additional objects are identified using RFID technology by maintaining a database in PC.	2012
98.	ITWI10	In-Building Lighting Management System with Wireless Communications	The Lighting management is done by checking the intensity of light depends upon the human's presence. And it is monitored in PC wireless mode.	2012
99.	ITWI11	Intelligent wireless street lighting system	This system proposes a solar operated street lighting system based on the presence of humans and light intensity and sending the data to the management center in wireless mode.	2012
100.	ITWI12	Zigbee Based Energy Efficient Outdoor Lighting Control System	In this system the outdoor lighting brightness is controlled in wireless communication mode depends on the presence on the humans and sensors are used in automatic mode.	2012
101.	ITWI13	An environment monitoring system for precise agriculture based on wireless sensor networks	In this system the agricultural parameter are obtained and transmitted to receiver section, monitored and uploaded to internet.	2011
102.	ITWI14	More Efficient Home Energy Management System Based on Zigbee Communication and Infrared Remote Controls	The objective of this project is to control the home devices using infrared remote controller and Zigbee communication. This proposed architecture gives more efficient energy-saving architecture and home energy management.	2011
103.	ITWI15	Digital control for Home Lighting Systems with Zigbee Communication	This paper presents various method of controlling the lighting system. Here, we use scheduled control, automatic control and manual control. It also uses dimming circuit to reduce the lighting illumination.	2011
104.	ITWI16	Real Time Paddy Crop Field Monitoring Using Zigbee Network	In this paper we are going to utilize the sensor in the paddy crop field area and gives proposed architecture for real time paddy crop field monitoring with Zigbee wireless sensor network.	2011

105.	ITWI17	The Design of Tiered Pricing Meter Based on Zigbee Wireless Meter Reading System	The tiered pricing meter based on ZIGBEE technology can record electricity consumption used by customers. After accumulation of a month, the monthly consumption of every period and the total energy will be transmitted through Zigbee to electricity board for billing.	2011
106.	ITWI18	Elder Care Based on Cognitive Sensor Network	The objective of this paper is to alarm an elderly person living alone in a panic condition. ZIGBEE is used as a wireless medium to get data from current sensor, weight sensor and water flow sensor. The controller receives the data from those sensors and data's are updated in PC.	2011
107.	ITWI19	Low Power RC5 Cipher for Zigbee Portable Biomedical Systems	This paper presents RC5 chiper architecture for low power dissipation for transmission of secured biomedical data. RC5 chiper is an encryption and decryption based architecture for secured wireless communication.	2011
108.	ITWI20	Traffic Information Service Based on Vehicle Ad-Hoc Network	We propose a traffic information service simply relying on the GPS systems in vehicles and wireless communication devices for vehicle-to-vehicle communication. Here, the Ad-Hoc network is a multichannel wireless communication system.	2011
109.	ITWI21	Monitoring and Alarming System Based on Zigbee Technology	This paper presents a GPRS and ZIGBEE integrated monitoring and alarming system. The GPRS technology is used to complete data exchanging between remote monitoring center and wireless sensor subnets.	2011
110.	ITWI22	A Forest Fire Monitoring System Based on GPRS and Zigbee Wireless Sensor Network	In this paper, a forest fire monitoring system is built based On ZIGBEE wireless sensor network and GPRS wireless communication. The objective of this paper is prevention and monitoring of large forest area using wireless communication.	2010
111.	ITWI23	CAN Bus Network Design based on Bluetooth Technology	This paper is an integration of Bluetooth technology and CAN bus. The fusion of short distance wireless communication technology and the CAN bus extends the application of field bus in the special industry environment, which makes effectively extend the field bus network.	2010

112.	ITWI24	Smart Home Energy Management System using IEEE 802.15.4 and Zigbee	This paper proposes a Zigbee based energy management. It utilizes various sensor networks for energy conservation and device control in smart home.	2010
113.	ITWI25	Zigbee - based Vehicle Access Control System	In this paper, a set of vehicle access control system based on Zigbee wireless technology Zigbee coordinator and its terminal nodes installed respectively in the entrance of the district and the vehicles, to form a Zigbee wireless sensor network.	2010
TECHNOLOGY: EMBEDDED **DOMAIN : NON-IEEE - WIRELESS**				
114.	NIWI01	Antenna Adjusting control through PC using RF Communication	This project describes the controlling of the antenna angle using the wireless technology using PC.	
115.	NIWI02	Smart zone based Vehicle speed control system based on RF	The main objective of the project is to avoid the accident in the smart zones by reducing the speed of the vehicle using the RF technology.	
116.	NIWI03	Anti theft alert and auto arresting System for Musuem and Jewellery Shops	This project describes the avoiding of the theft in the area using the RF technology and intimation via alerting system	
117.	NIWI04	Wireless motor speed control Using RF	This project describes the speed control of the DC motor using the RF technology. The speed will be defined by the PWM.	
118.	NIWI05	Border security system using RF	The main objective of the project is to make the fisherman to avoid the crossing of the border using the RF technology.	
119.	NIWI06	Vehicle detection in no parking area using RF and magnetic Sensor	This project describes the system which will control the vehicle to avoid the parking in the no parking area using the sensor technologies.	
120.	NIWI07	Intelligent traffic system for emergency vehicle using Wireless Sensor Network	The main objective of the project is to make the emergency vehicle to go fast in the traffic area by changing the signal light using the RF technology	
121.	NIWI08	RFID Based attendance management with door access control	The main objective of the project is to avoid the manual power in the attendance management system by using the RFID technology.	
122.	NIWI09	Signal indicator for Vehicles in Single hair pin Bend and vehicle counter	This project describes the system which will be useful for avoiding the accident in the hair pin bend using the RF wireless technology.	
123.	NIWI10	Wireless vehicle path finder using IR and RF	The main objective of the project is to avoid the accident in the roadways using the RF and IR sensor. The vehicle will be controlled using the RF wireless	

124.	NIWI11	Wireless digital code lock with status display	This project describes the system which will increase the more security in the home or industries using the RF technology by sending the code.	
125.	NIWI12	Radio Frequency based Real-time Child monitoring and alarm system	The main objective of the project is to save the child in the congested area using the RF wireless technology and alert the parents when the abnormality occurs.	
126.	NIWI13	Development of Anti-Rigging Voting system using RFID card Technology.	This project describes the system which will be reducing the complexity of the normal voting system by implementing the RFID technology.	

GSM & GPS

TECHNOLOGY: EMBEDDED

DOMAIN : GSM & GPS

127.	ITGP01	Multi sensor Railway Track Geometry Surveying System	In this paper, a new railway track geometry surveying system, which is designed by integrating the inclinometer, GNSS receiver, and total station, is introduced	2012
128.	ITGP02	Bus Monitoring System Based On Zigbee And GPRS	This paper proposes a Supervisory system which combines the advantages of Zigbee & GPRS technology to improve the operating efficiency of bus system	2012
129.	ITGP03	A Real-Time Conductor Sag Measurement System Using a Differential GPS	This paper proposes a Differential Global Positioning System(DGPS) to directly measure the Conductor Sag in Transmission Lines	2012
130.	ITGP04	Wireless Black Box Using MEMS Accelerometer and GPS Tracking for Accidental Monitoring of Vehicles	This paper proposes a system which combines GPS & GSM with MEMS technology to monitor emergency Conditions of vehicles on road	2012
131.	ITGP05	Automatic Measurement and Reporting System of Water Quality Based on GSM	This paper proposes an intelligent system which measures the quality of water with aid of associated sensors and reports it.	2012
132.	ITGP06	Aided Navigation Techniques for Indoor and Outdoor Unmanned Vehicles	This paper proposes a navigation technique which uses URF for indoor and GPS along with INS system for outdoor navigation which is used with UV	2012

133.	ITGP07	Automatic Ambulance Rescue System	This paper proposes an approach which embodies vibration sensor, GSM and GPS to immediately inform Emergency vehicle incase of accident	2012
134.	ITGP08	Design of Concealed Alarm System Based on GSM	This paper proposes a system which uses a foot step alarm system and IR remote controlled alarm system in case of emergency at banks and organization	2012
135.	ITGP09	Positioning and Tracing System Study Of All Terrain Forest Fire Patrolling and Fighting Vehicle	This paper describes the design of a vehicle which will be useful for firefighting during the fire accident. The vehicle will be controlled wirelessly.	2012
136.	ITGP10	Remote Energy Monitoring, Profiling and Control Through GSM Network	The objective of the paper is to monitor the energy consumption by sending the energy meter reading to the monitoring section without using the manual power.	2012
137.	ITGP11	Realization of Intelligence Monitoring System Based on Remote Sensor Technology	This paper describes the increasing of security in monitoring of the important places using the sensor technology.	2012
138.	ITGP12	The Design and Implementation of Remote Real Time Monitor System for Embedded Devices based on GPRS	This paper introduces the embedded and the GPRS based monitoring system which will uses the renewable sources. This system will be in wireless manner to reduce the manual power.	2012
139.	ITGP13	Design of Intelligent Home Appliance Control System Based on ARM and Zigbee	This paper describes the controlling of many devices which will be connected with the Zigbee network. The main node contains the ARM with touch screen for controlling of the devices from the control center.	2012
140.	ITGP14	Database Design of GPRS-Oriented Remote Meter Reading System	The main objective of the paper is to reduce the manual power in the meter reading system. The readings from the many nodes will be uploaded in the web server using the GPRS technology with the meter information, user information.	2011
141.	ITGP15	The energy consumption monitoring platform design for large-scale industry users based on the GPRS	This paper describes the uploading of the meter reading to the EB section using the GPRS technology from the remote place itself.	2011
142.	ITGP16	Design of Gas Information Collection and Control System Based on GPRS	The main objective of this paper is to monitor the gas parameters in the gas industries. The sensors will be used for monitoring the parameters like pressure, flow, and leakage in the pipeline.	2011

143.	ITGP17	Dual-Microcontroller Based GPRS Data Transmission Control System Design	This paper describes the implementation of dual microcontroller instead of using the high cost controllers to achieve the application of increasing the communication devices.	2011
144.	ITGP18	Development of GPRS-based Leak Detection System for Pipe Pushing Crossing Part of Nature Gas Pipeline	This paper describes the detection of gas leakage in the pipe line in roadways or under the railway tracks. Sensor technology is used for measuring the pressure and the gas leakage and uploaded in internet using the GPRS.	2011
145.	ITGP19	Research on alarm system of railway crossing based on GPS and GPRS	The main objective of the paper is to intimate the railway crossing section about the arrival of the train. GPS and the sensor technology is used for monitoring the location and the speed of the train. The information will be uploaded in internet via GPRS modem	2011
146.	ITGP20	Design of Auto-guard System Based on RFID and Network	The auto-guard system combines the advantages of RFID and GSM together. It is the very effective method to reduce the theft rate of vehicle; it effectively utilizes the usage of GSM and RFID to avoid vehicle theft.	2011
147.	ITGP21	The Flexible Bus Systems Using Zigbee as a Communication Medium	This project is combined of the effective usage of the Zigbee, GPS, and RFID. It maintain and regulates the Bus system effectively and how to make it more reliable using short range wireless technology Zigbee	2011
148.	ITGP22	Position Matching Based Autonomous Speed Regulation System for Vehicles	This paper deals with creating an onboard speed regulation module for vehicles which can monitor as well as control their instantaneous speed in comparison with the maximum permissible speed of that location. The location is obtained using position tracking technology of GPS and GSM system.	2011
149.	ITGP23	Research on Communication link of Remote Wireless Monitoring System Based on GPRS and MCU	This paper briefly describes the design of remote wireless monitoring hazardous parameters through sensors using MCU and updated the values in the internet through GPRS (General Packet Radio Service).	2011

150.	ITGP24	Smart Parking Reservation System using Short Message Services (SMS)	In this paper a smart parking system is proposed in commercial car park areas. A parking reservation is done in such a way that users book their parking slots through short message services (SMS). The conformation will also be responded.	2011
151.	ITGP25	RFID and GSM Technology Building Intelligent Relief Supplies Distribution and Monitoring System	This paper proposes a system using sensors, RFID system and GPS positioning chips collecting data and coordinate data, which is transmitted to data processing center server through GSM wireless communication network real-timely.	2010
152.	ITGP26	Electronic Energy Meter With Instant Billing`	In this project automated billing of energy meter with postpaid mobile connection is proposed. It utilizes the usage of GSM, to know our due bill instantly and can even pay for it.	2010
153.	ITGP27	Car Monitoring, Alerting and Tracking Model	This project combines the integration between monitoring and tracking system. This system effectively utilizes the usage of GSM Modem for monitoring and tracking system.	2010
154.	ITGP28	Electronic Toll Collection System based on Global Positioning System Technology	In this project, the disadvantage of DSRC (dedicated short range communication) -based ETC is avoided. To implement this flexible system of GPS-based ETC system, along with its charging zone and charging mode are all provided.	2010
155.	ITGP29	Design of A Hybrid RFID/GPS-Based Terminal System in Vehicular Communications	A new solution that integrates RFID identifying and GPS tracking was proposed and implemented, which can enhance Automatic management, information security, real-time trace and location, and anti-theft in digital logistics management.	2010
156.	ITGP30	Identifying Objects Using RF Transmitters and Receivers, and Retrieving Data Using GSM.	In this project we can identify the lost objects through RF technology using GSM modem.	2010
157.	ITGP31	Design Of Intelligent Traffic Light Controller Using Embedded System	In this project we can control the heavy traffic from remote place through wireless technology (GSM). Hence it is very efficient than the conventional traffic control	2010
158.	ITGP32	Remote Monitoring Intelligent System Based on Fingerprint Door Lock	Fingerprint identification with a unique, reliable, in the security field has been widely used. The system can accurately identify lively fingerprint, and sent unlock ID information, the illegal burglary information to the owner by the GSM network	2010

TECHNOLOGY: EMBEDDED DOMAIN : NON-IEEE- GSM & GPS			
159.	NIGSM01	Heavy Vehicles Alert And Intimating System For Traffic Police Using Capacitive Sensor And Gsm.	This project describes the intimation of entry of the heavy vehicles to the corresponding person using the sensor technology via GSM modem.
160.	NIGSM02	Vehicle Accident Intimation And Location Finder Using Gsm And Gps	In this project, we can employ Sensor, GSM Modem and GPS Modem attached with to a microcontroller through ADC which controls the engine. If we have any abnormal send a SMS in 1. 3. NIGSM03 GPS value with the help of modem.
161.	NIGSM03	Gsm And Gps Based Vehicle Tracking And Locating System	In this project, we can employ a GSM Modem & GPS Modem attached with to a microcontroller and monitor a GPS value from the vehicle to controls the engine. If we send a SMS to modem to control the vehicle and receive a present vehicle position.
162.	NIGSM04	Ldr Based Highways Road Light Failed Intimation Using Gsm And Gps.	In this project we are going to monitor the fault in lights in the highways. The fault will be intimated using the GSM with the location using the GPS.
163.	NIGSM05	Petrol Determination Using Gsm.	The main objective of this project is to intimate the petrol level to the user by using the sensor technology via GSM.
164.	NIGSM06	Gsm Based Highway Road Traffic Monitoring System.	This paper describes the intimation of the traffic condition to the user mobile via GSM modem when the request is received.
165.	NIGSM07	GPS Based Border Alert System for Fisherman	This project describes the alerting the fisherman when he cross the border using the GPS technology.
166.	NIGSM08	SMS based Weather Reporting System	The main objective of the project is to intimate the weather report to the user when he send the request to that system.
167.	NIGSM09	Gsm based Irrigation System	The main objective of the project is to reduce the manual power in the agriculture field using the GSM technology.
168.	NIGSM10	Voting machine through GSM modem	This paper describes the GSM based voting system which will reduce the complexity in the normal voting system.
169.	NIGSM11	Tilt Measurement and Intimating Using Gsm.	This project describes the measurement of angle using the sensor technology to reduce the manual power which will be used in industries.
170.	NIGSM12	Intelligent Home Security and Management System through Gsm	The main objective of the project is to increase the security in home or industries using the sensor technologies.
171.	NIGSM13	Transformer Oil and Temperature Checking and Intimating To the EB	This project describes the measurement of the oil .condition and the abnormality will be automatically intimated to the EB section.

CONSUMER ELECTRONICS

TECHNOLOGY: EMBEDDED
DOMAIN : CONSUMER ELECTRONICS

172.	ITCE01	An Open Traffic Light Control Model for Reducing Vehicles CO2 Emissions Based on ETC vehicles	This paper proposes a three tier system which intelligently reduces CO2 emission of vehicles by controlling Traffic Flow	2012
173.	ITCE02	MEMS Accelerometer Based Nonspecific-User Hand Gesture Recognition	This paper proposes a system in which gesture recognition using MEMS tri axial Accelerometer which can be applied for further applications	2012
174.	ITCE03	Optical Device Indicating a Safe Free Path to Blind People	This paper is an intelligent system for blind people using High intensity light source and a vibrator which aids to find a free path	2012
175.	ITCE04	Sensor Network Based Oil-well Health Monitoring and Intelligent Control	This paper a system is proposed to monitor the oil well parameters & the motors parameters used such as speed, current, voltage.	2012
176.	ITCE05	Target Detection and Classification Using Seismic and PIR Sensors	This paper proposes a system which is employed in Borders to monitor the movement using Seismic and PIR sensor classifying the trespassing as human or animal or Vehicle	2012
177.	ITCE06	Automatic Detection and Recognition of Road Sign for Driver Assistance System	This paper proposes a system which uses MATLAB to recognize road signs and the same is announced using APR9600 voice IC.	2012
178.	ITCE07	Design of User Specific Intelligent Cell Phone Jammer	This paper proposes an intelligent cell phone signal arresting system which jams the mobile RF signals at its area of coverage.	2012
179.	ITCE08	A Pedestrian Speed Acquisition Experiment based on RFID	This paper proposes a system which uses RFID tag and reader to measure Pedestrian Speed which is helpful in traffic signal assistance.	2011
180.	ITCE09	Car Monitoring using Bluetooth Security System	This paper proposes a system which establishes a security system based on PIR sensor and Bluetooth and user mobile.	2011
181.	ITCE10	Large Scale Active RFID System Utilizing Zigbee Networks	This paper proposes a large scale active RFID system in order to extend a reader's radio coverage and use of wireless technology.	2011
182.	ITCE11	A Power Saving Jamming System for E-GSM900 and DCS 1800 Cellular Phone Networks for Search Rescue Applications	The mobile signal is identified and controlled by white noise signal generated to produce noise signal in order to avoid mobile communication.	2011

183.	ITCE12	An RFID-Based Reminder System for Smart Home	We present a prototype reminder system based on RFID and wireless technologies. The RFID makes it easy to detect and record the objects that the user takes out. Through the analysis on these records, the system would know what the user should bring along every day and what objects the system should put in the reminder list.	2011
184.	ITCE13	RFID and Zigbee Based Manufacturing Monitoring System	In this paper, the RFID and Zigbee based manufacturing monitoring system is a good approach to improve monitoring efficiency so as to improve management efficiency in enterprises.	2011
185.	ITCE14	Mechanism with Four Degrees of Freedom, Design and Construct with Controller for Increasing the Power Output of Solar Cell	In this paper, to increase the power of solar cell in industry and makes a system for getting maximum rate of sunlight in day and seasons which will help to get maximum power from panel . The mechanic part which has been designed so simple and can install in anywhere, by very low power electric motor.	2011
186.	ITCE15	Design of Sensor Modules of Active & Intelligent Energy-saving System	We propose new method of intelligent energy-saving system to accomplish the goal of real energy-saving from the view-point of system-orient strategy. In this system included sensors and wireless protocol to achieve intelligent energy saving system.	2011
187.	ITCE16	An Integrative Model of Consumer's Adoption of RFID Credit Card Service	In this paper, Different approaches to consumer's adoption of new technology-based service into an integrative model. The model is tested with data from RFID credit card adoption technique.	2011
188.	ITCE17	A Wireless Sensor Node SoC with a Profiled Power Management Unit for IR Controllable Digital Consumer Devices	In this paper,we introduce a wireless sensor node including the power management unit for universal remote controller. We have newly applied a profiled power management technique that incorporates the selective power supplying scheme for dynamic power management.	2010
189.	ITCE18	Real-Time Atomization Of Agricultural Environment for Social Modernization of Indian Agricultural System	In this paper, using ARM7 and GSM is focused on atomizing the irrigation system for social welfare of Indian agricultural system and also to provide adequate irrigation in particular area.	2010

TECHNOLOGY: EMBEDDED DOMAIN : NON-IEEE- CONSUMER ELECTRONICS			
190.	NCE01	Anti Sleep Alarm for Students Based on RTC	In this project an intelligent system is established to help parents and students during the period of exam preparation.
191.	NCE02	Traffic Rules Monitor at Signal	In this project, the traffic rules are monitored intelligently monitored at signals which in turn regulate traffic flow avoiding unwanted congestion.
192.	NCE03	Automatic code changing mechanism for Locker Security	In this project code security is enhanced by using multiple codes in a sequential order for each and every use by the owner.
193.	NCE04	RTC based automatic water supply	In this project an intelligent water supply system is established to produce regular supply of water, reducing manual work
194.	NCE05	Microcontroller Based Dam water level Indicator and Controlling System	In this project the Dam water level is monitored and shutter is controlled based on the level of water to avoid damage or flooding of banks.
195.	NCE06	Motion Based Password for device switching	In this project the password system is altered using MEMS accelerometer creating a system with motion password.
196.	NCE07	I-Button Based Door Lock System	In this project the door lock system is modified with I-button which enhances the security since each I-button has unique ID.
197.	NCE08	Intelligent Instant password controlled Home Security System	In this project a system is defined in which the password for each device is set instantly so that the devices are more secured from unauthorized access.
198.	NCE09	Talking Keypad for Blind People	In this project a keypad is designed for blind people, which assists them intelligently in entering their text of desire.
199.	NCE10	Bidirectional visitor Counter and Display System with maximum Capacity Alarm	In this project the number of persons entering a room is restricted and based on the number of persons present in the room, the lights are controlled.
200.	NCE11	LDR based Power Saver for Street Light Control System	In this project the street lights are controlled intelligently based on LDR reducing wastage of power and eliminating manual work.
201.	NCE12	Real Time Clock based automatic college bell ringing system along with temperature display	In this project the college bell system is automated using RTC and temperature measurement is done along with the ringing system.

WEB BASED

TECHNOLOGY: EMBEDDED

DOMAIN : WEB BASED

202.	ITWB01	IMA: An Integrated Monitoring Architecture With Sensor network	This paper proposes a system which monitors industrial parameters such as temperature, pressure etc and uploads it in Internet.	2012
203.	ITWB02	A Remote Online Monitoring System for Dam	This paper measures the vital parameters of Dams and uses GPRS technology to remotely monitor the same parameters.	2011
204.	ITWB03	Embedded Web Server Application Based Automation and Monitoring System	This paper proposes an embedded web server which uses Ethernet to monitor and control the sensors and home appliances.	2011
205.	ITWB04	ARM Embedded Web Server Based on DAC System	This paper uses ARM 7 processor to establish a Data Acquisition System which measures industrial parameters such as temperature, pressure and oil level.	2011
206.	ITWB05	Intelligence Monitoring System Based on ARM and Information Fusion	This paper establishes a system which uses Ethernet along with ARM7 and directly uploads the measured zonal parameters into internet.	2011
207.	ITWB06	Online Monitoring of Wind-induced Vibration of Transmissions Steel high Tower	This paper proposes a system which measures the deformation in Steel towers by measuring the wind induced vibration.	2011
208.	ITWB07	Design of On-line Interactive Data Acquisition and Control System for Embedded Real Time Applications	Embedded web server is used to collect the data with clients in online. In this system data can be collected with help of ARM processor.	2011
209.	ITWB08	Research on water-saving irrigation automatic control system based on Internet of things	In this paper, the design of wireless sensor network and Internet technology of farm-land automatic Irrigation control method. The different farm parameter is updated with internet using Embedded technology.	2011
210.	ITWB09	Next Generation System for Real-Time Monitoring of Rainfall, Soil Moisture, and Soil Temperature	In this paper, we propose wireless technology to measure rainfall, soil moisture, and soil temperature and updated with web server.	2011

211.	ITWB10	Development of On-line Monitoring System of Substation Power Equipment Based on IEEE1588 Standard	With the development of digitization of substation, the on-line monitoring system of substation power equipment is adopting the IEC61850 standard to realize substation parameter using wireless communication.	2011
212.	ITWB11	Intelligent online Measurement and Management of energy Meter Data Through Advanced Wireless Network	In this paper, we design an embedded intelligent electric meter based on advanced wireless data acquisition system in view of the complicated cables and accident potential in the process of data acquisition of electric meter.	2011
213.	ITWB12	Web-based Real-time Remote Monitoring for Pervasive Healthcare	This system can continuously measure physiological signals of patient and the data are transferred to remote location in real-time	2011
214.	ITWB13	The Application of Stolen Radioactive Source Tracking System Based on Internet of Things Technology	The design and implementation of radioactive source control management system based on Internet of things technology. The stolen Radioactive Source Tracking is done help of GSM and GPS technology.	2011
215.	ITWB14	Design and Implementation of the Lab Remote Monitoring System Based on Embedded Web Technology	Embedded web-based remote monitoring system for the environment in the laboratories is monitored using multiple sensors and RS232 protocol.	2010
216.	ITWB15	Design of ARM-based Embedded Ethernet Interface.	In this paper, an embedded Ethernet interface based on ARM processor is designed.	2010
217.	ITWB16	Distributed Remote Temperature Monitoring and Acquisition System Based on CAN Bus	According to temperature monitoring needs in the actual Production, the design of distributed CAN bus remote temperature monitoring system is done in this paper.	2010
218.	ITWB17	Design of Wireless Embedded Thin Web Server Based on Zigbee	This paper ntroduces the hardware and software structure of an embedded thin web server. Different from other wired embed web servers, this embedded thin web server is build on Zigbee, a wireless ad hoc network communication technology	2010

TECHNOLOGY: EMBEDDED DOMAIN : NON-IEEE- PC BASED			
219.	NPC01	GSM based instantaneous vehicle registration details extraction system	This project helps to traffic police to identify the vehicle registration details with help of embedded microprocessor and GSM technology.
220.	NPC02	Finger print based secure ATM process	This project proposes an ATM Security system using Finger print. Since finger print is unique secure transaction is provided.
221.	NPC03	Student status identification using GSM	This project helps to student's parent can know about their child attendance and feedback with help of GSM technology.
222.	NPC04	Multipurpose card with unique identification	In this project single card and finger print scanned have used for the multiple application which helps to society with the use of single card.
223.	NPC05	RFID based library database management and search tool implementations	Maintaining the database in the library using RFID and microcontroller for easy and secured accessing of books in the library.
224.	NPC06	PC based Examination for Blind people	In this project an online examination system prototype is established for blind people using voice with the aid of mike and headphone.
225.	NPC07	A Design of Bi-verification Vehicle Access Intelligent Control System based on RFID	This project establishes a system in which the vehicle access is bi-verified with RFID tag and password and alarming when mismatch occurs.
226.	NPC08	Banking password and authentication process using SMS	In this project the banking process is modified intelligently using RFID and GSM to eliminate unauthorized access of the user account.
227.	NPC09	Embedded based intelligent e-voting machine	This project uses finger print scanner and PC to design an electronic voting machine in which the finger print is used as voter ID.
228.	NPC10	Voice to text conversion design for dumb People Interaction	This project assists deaf people in interacting with others by converting the voice input given into text for the deaf to understand using DOT net application.

ELECTRICAL

TECHNOLOGY: EMBEDDED

DOMAIN : ELECTRICAL

229.	ITEEE01	Embedded System Integrated Into a Wireless Sensor Network for Online Dynamic Torque and Efficiency Monitoring in Induction Motors	In this proposed system has been designed monitoring of the torque and efficiency of the induction motor. The values calculated by the embedded system are transmitted to a monitoring the unit through an IEEE 802.15.4-based WSN.	2012
230.	ITEEE02	Battery Energy Storage for Enabling Integration of Distributed Solar Power Generation	The objective of the paper is to overcome the disadvantage of the consumption of electrical energy by implementing the solar power	2012
231.	ITEEE03	Smart Solar Home System with Safety Device Low Voltage Alert	In this paper we discussed about importance of solar home system for domestic application. Here we will also discuss a safety device of solar home system. This paper also focused safety device with a practical experiment. We implement a low voltage alert circuit and low voltage indicator circuit for better performance of solar home system.	2012
232.	ITEEE04	Compact Emergency Lamp Using Power LEDs	This paper mainly focuses the cost reduction. So we are designing the low-cost electronic circuit to drive and control the current of LEDs arranged in a single enclosure.	2012
233.	ITEEE05	Hybrid Optoelectronic Sensor for Current and Temperature Monitoring in Overhead Transmission Lines	This proposed system describes the monitoring of the current and temperature in high voltage transmission lines. The system uses reliably proven electronic technology to measure temperature and current.	2012
234.	ITEEE06	Low Cost Solar ECG with Bluetooth transmitter	This paper presents the solar power based ECG sensor for heart patient. The Electrocardiograph (ECG) is a diagnostic instrument which measures the electrical activity of the heart, providing valuable information of cardiac disorders like infarction, Atherosclerosis, etc.	2012

235.	ITEEE07	Design and Performance Analysis of Water Pumping Using Solar PV	This paper deals with the connection of DC solar water pump is built and experimented to observe the results with a direct connection from solar array. There is no need of battery backup because of the low power maintenance.	2012
236.	ITEEE08	Energy Monitoring System using Sensor Networks in Residential Houses	This paper proposes a PLC system in which the daily power consumption for each device and transmitted in wireless to the created database section.	2012
237.	ITEEE09	Smart Charge: Cutting the Electricity Bill in Smart Homes with Energy Storage	This paper introduces a system which assists the users in energy conservation at homes by reducing the power fluctuations.	2012
238.	ITEEE10	Design Optimization of TRIAC -Dimmable AC-DC Converter in LED Lighting	This paper proposes an intelligent TRIAC based LED dimming system which regulates the AC power and controls the LED intensity.	2012
239.	ITEEE11	Research on an Improved PWM Control Mode of DC Motor	This paper proposes an improved PWM control based on MOSFET to control the speed of the DC Motor.	2012
240.	ITEEE12	Design for Middle-Way of Intelligent Energy-Saving System with Embedded System	This paper proposes an online controlled environmental system which automatically controls the environmental parameters according to the set value.	2012
241.	ITEEE13	An on-line distributed induction motor monitoring system based-on ARM and CAN bus	This paper presents an on-line distributed induction motor monitoring system based-on the ARM, which is integrated with the Embedded and CAN bus technologies. Current and voltage of the motor from different fields of motors are measured in this system.	2011
242.	ITEEE14	Self-Powered Wireless Sensor for Air Temperature and Velocity Measurements With Energy Harvesting Capability	The system has been designed for measuring the air temperature and velocity of an airflow and transmits the measured data, with 2.4Ghz point-to-point communication, to a receiving unit. The receiving unit works with a power-harvesting module using a prototype wind mill.	2011

243.	ITEEE15	Implementation of an Embedded Induction Motor Test and Analysis System	With the high processing speed of the ARM microcontroller, the induction motor test and analysis system constructed with the ARM7 Processor and graphical LCD make the system more reliable.	2011
244.	ITEEE16	The Design and Implementation of Power Earth-Line Monitoring System	This paper describes the power earth-line monitoring system for the planning, design and implementation process. Ground state data of the power lines are collected by the monitor, and then the data are transmitted to monitoring platform through the GSM short message system.	2011
245.	ITEEE17	Supervisory Predictive Control of Standalone Wind/Solar Energy Generation Systems	In this Paper, we design the supervisory control system via model predictive contro which computes the power references for the wind and solar subsystems. The maximum power generated by the renewable resources is utilized by the load	2011
246.	ITEEE18	Real Time Control of DC Motor Drive using Speech Recognition	This paper introduces a new approach to control and drive the DC motor, using speech recognition. The speech signal can be provided through microphone that is connected to computer. Using MATLAB process the speech is recognized and PC gives control commands to the microcontroller to drive the DC motor.	2011
247.	ITEEE19	360° Sun Tracking With Automated Cleaning System For Solar PV Modules	A novel mechanism of sun tracking with automatic cleaning of PV modules is presented and cleaning Mechanism of the PV modules consists of sliding brushes, which slides over module and cleans it twice a day, wherein PV panel makes a rotation of 360o in a day.	2010
248.	ITEEE20	A New Intelligent Remote Control System for Home Automation and Reduce Energy Consumption.	This paper presents the design and implementation of an internet-based smart remote control system for home automation, dedicated to power management that adapts power consumption to available power resources according to user comfort and cost criteria.	2010
249.	ITEEE21	A Novel Technique for Preventing Current Method Electricity-stealing.	In this project we can recognize the normal, opened or shorted state of current transformer secondary side circuit correctly and we can prevent current method electricity-stealing effectively.	2010

TECHNOLOGY: EMBEDDED DOMAIN : NON-IEEE- ELECTRICAL			
250.	NIEEE01	Voice operated induction motor speed control through RF communication	This project is designed to control the induction motor through voice command using PC and RF communication.
251.	NIEEE02	Payment system made automatic as per consumer requirement	This project is designed to consumers in home or office for payment system using RFID and GSM technique.
252.	NIEEE03	Transformer industrial parameters fault identification and intimate to EB section	This project is designed to monitor the transformer voltage and current level and the fault intimation will be sent through GSM.
253.	NIEEE04	Energy meter monitoring and control system using SMS technology	This project is designed to monitor the home energy consumption which the communication between the user and EB office will be through GSM
254.	NIEEE05	Automatic Induction Motor Starter With Programmable Timer	This project is designed to control the induction motor based on the programmable timer
255.	NIEEE06	Induction Motor Control using Touch Screen	This project is designed to control the induction motor through the Touch screen which interfaced with the microcontroller
256.	NIEEE07	LDR based automatic lamp illumination controller with High Power/Intensity LED lighting	This project is designed to control the LED Lighting based on the LDR which sense the environment light illumination
257.	NIEEE08	Contactless Digital Tachometer Using IR	This project is designed to show the digital display using LCD and the IR receiver is used
258.	NIEEE09	PID Controller for DC motor	This project is designed to control the DC motor through the microcontroller based on the current level
259.	NIEEE10	Microcontroller based Multiple device control based on change in input frequency	This project is designed to control the multiple devices through the microcontroller based on the input frequency variation
260.	NIEEE11	Microcontroller based coded device switching system for multiple device switching	This project is designed to control the multiple devices through the microcontroller which based on the code switching
261.	NIEEE12	Digital Watt meter with voltage and current display	This project is designed to display the watt level of a electrical device using the microcontroller
262.	NIEEE13	Frequency meter for Digital Signals using microcontroller	This project is designed to display the frequency level based on the digital signal input given to the microcontroller transaction is provided.

BIOMEDICAL

TECHNOLOGY: EMBEDDED

DOMAIN : BIOMEDICAL

263.	ITBIO01	A Fast and Easy-to-Use ECG Acquisition and Heart Rate Monitoring System Using a Wireless Steering Wheel.	In this system the ECG and heart rate of a person by fixing the system inside the steering wheel and transmitted to wireless mode.	2012
264.	ITBIO02	A Passive Radio-Frequency pH-Sensing Tag for Wireless Food-Quality Monitoring	This system proposes the method to sense the pH level of the food by checking the acidity level and sending the data in wireless communication to receiver side.	2012
265.	ITBIO03	A Wearable Inertial Sensor Node for Body Motion Analysis	In this system a wearable sensor node is designed to check the body motion of a person like sitting, walking and standing etc.	2012
266.	ITBIO04	A Zigbee-Based Wearable Physiological Parameters Monitoring System	This system proposes a method to monitor the patient abnormal parameters by designing wearable sensors for checking the condition of a patient.	2012
267.	ITBIO05	Dew-Based Wireless Mini Module for Respiratory Rate Monitoring	In this system the respiratory rate is going to be monitored by fixing dew based sensor and checking for the moisture level in the out coming air.	2012
268.	ITBIO06	Sensors-Based Wearable Systems for Monitoring of Human Movement and Falls	In this system the human movement is monitored by fixing multiple sensors and depends upon the sensor output the abnormal status is identified.	2012
269.	ITBIO07	A Single Supply Standard 8051 Microcontroller based Medical K-grade Isolation ECG Module with Graphics LCD	In this system the ECG parameter of a patient is gathered and displayed in graphical LCD in the form of analog signal.	2012
270.	ITBIO08	Self Healthcare Management System based on RFID Technology	In this system the biomedical parameters like weight, temperature and other data's are monitored and stored in the chip i.e. RFID tag. This tag is used for future details extraction of a patient.	2011
271.	ITBIO09	Design, Development and Testing of a Wireless Sensor Network for Medical Applications	In this paper the patient parameters are obtained and transmitted to receiver section with PC and also send as message to the well-wishers through GSM modem.	2011

272.	ITBIO10	Design Of Portable Heart Rate Acquisition Instrument Bases On Bluetooth Transmission	In this system the heart rate data of a patient is monitored and transmitted to the receiver section using Bluetooth technology.	2011
273.	ITBIO11	A Zigbee-Based Tele cardiology System for Remote Healthcare Service Delivery	In this paper, this system provides doctors with the ability to monitor ECG level of patients over the Internet with help of Zigbee protocol.	2011
274.	ITBIO12	Design of Wireless Sensor System for Neonatal Monitoring	We propose the application of wireless transmission technology for neonatal monitoring at NICU. To demonstrate the design concept a prototype wireless transmission system is built using the microcontroller and wireless technology.	2011
275.	ITBIO13	Wireless Sensor Networks for Monitoring Physiological Signals of Multiple Patients	A novel wireless sensor network structure to monitor patients ECG in their own home through a remote monitoring system of physiological signals was presented.	2011
276.	ITBIO14	Monitoring of Posture Allocations and Activities by a Shoe-Based Wearable Sensor	In this paper, we propose wearable shoe-based device and related pattern recognition methodology for automatic recognition of different postures and activities using bionic sensor and wireless technology.	2011
277.	ITBIO15	The intelligent blood collecting apparatus based on internet working	The blood collect apparatus uses the advanced technology of MCU, fingerprint identifying and RFID. It controls the operator of collect-blood strictly to prevent the errors caused by man.	2011
278.	ITBIO16	Secure Remote Patient Monitoring System	In this paper, we propose wireless technology to get physical parameters of patient in hospital server. GSM is also used to pass SMS to remote doctor at emergency condition.	2011
279.	ITBIO17	A Real-Time Wireless Brain–Computer Interface System for Drowsiness Detection	In this paper, wireless EEG-based BCI system was proposed for drowsiness detection in car applications. It consists of a wireless transceiver and EEG sensor which helps to avoid accident.	2010
280.	ITBIO18	A Novel MEMS Respiratory Flow Sensor	The sensor was demonstrated to be sensitive enough to detect the respiratory flow rate, and the relationship between flow rate and sensed voltage is quite linear. If one can integrate the sensor with its sensing circuit into a single chip, the cost of a pneumatic system can be greatly reduced.	2010

TECHNOLOGY: EMBEDDED DOMAIN : NON-IEEE- BIOMEDICAL			
281.	NBIO01	Drug Distribution Without Aid of the Humans	This project is designed to help the elder people or patient to take their medicine for the correct time using DTMF and mechanism
282.	NBIO02	Microcontroller based blood pressure monitoring system	This project is designed to monitor the blood pressure for the patient using the sensor interfaced with the microcontroller
283.	NBIO03	Intelligent Blood Collection System Using RFID	This project is designed to collect the blood from donor using RFID Technique.
284.	NBIO04	Wireless Heart Beat Rate Monitoring And Intimation	The project is designed to monitor the heart beat rate of a patient using RF technique
285.	NBIO05	Biomedical Telemetry for soldiers in Warfield	The project is designed to monitor the heart beat rate and body temperature of a soldier using RF technique
286.	NBIO06	Respiration rate monitoring system	This project is designed to monitor the respiratory level of a person or patient, the status will be displayed in LCD
287.	NBIO07	Design and implementation of Programmable Apnea monitoring System	This project is designed to monitor the Apnea that is which to check the respirator level of the lungs to a patient
288.	NBIO08	Tongue Pressure Sensing System for Epilepsy Patient	This project is designed to monitor the epilepsy for the patient using the tongue pressure sensor
289.	NBIO09	Drips rate and level monitor and alarm system	This project is used to monitor the Drips rate and level during the patient usage which is an automatic process to intimate through alarm.
290.	NBIO10	Electrocardiogram Signal Monitoring Using GSM	This project is designed to monitor the patient health status using sensors and the intimation send through GSM
291.	NBIO11	Temperature and pulse rate monitoring system	This project is designed to monitor the pulse rate of a patient using sensors also the status will displayed in LCD
292.	NBIO12	Life Support System with Complete ICU Monitoring	The project is designed to monitor the ICU environment for the support of doctors to take care of patient in the room using sensor
293.	NBIO13	RFID based medical equipments location finding & maintenance	This project is designed to know the status of the medical equipment used in the hospitals using the RFID technology

Education Partners:

Technologies and Domain used:

IEEE 2012, 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/GPRS, Power Electronics & Systems, Electrical, DSP, RTOS, Bio metrics, etc.

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