**PIC DEVELOPMENT BOARD**

**FEATURES**
- 4x3 Matrix Keypad
- 4 No's 7Seg Multiplexed Display
- 2X16 Alpha Numeric LCD display
- Serial EEPROM (SPI protocol)
- DS1307 RTC with Battery
- UART(RS232, serial communication)
- External ADC (POT)
- PS2 connector
- Zigbee module
- Inverter IC (ULN2803)
- DC Power Supply jack (5v Dc)
- 2 No's Relay-single pole(to connect a load)

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**AVR ATMEGA8 DEVELOPMENT BOARD**

**FEATURES**
- 40-Pin Socket (MCU)
- 4x3 Matrix Keypad
- Serial EEPROM (SPI, I2C)
- 2X16 Character LCD
- DS1307 RTC with Battery Backup
- UART(RS232, serial communication)
- PWM Output
- 3 Nos. Interrupts, Reset Button
- 8KFlash – Program Memory
- 1MHz inbuilt crystal
  32.768 KHz for Timers
APM LPC2129 DEVELOPMENT BOARD

FEATURES

- RESET button.
- 4 interrupt Switches.
- 4*4 Matrix keypad.
- 4 Seven Segment LED.
- Real Time Clock Circuitry.
- 12.00 MHz crystal.

- MCU: 16/32-bit ARM7TDMI-S with 256 kBytes Program Flash, 16 kBytes RAM, RTC, 4x 10-bit ADC 2.44 μS, 2x UARTs, 2x CAN, I2C, SPI, 2x 32-bit TIMERS, 7x CCR, 6x PWM, WDT, 5V tolerant I/O, up to 60 MHz operation.

- Two-channel RS232 interface with two RS232 Sub-D 9-pin connectors.
- Two-channel CAN interface with drivers (MCP2551) and two Sub-D 9-pin connectors.
- One I2C port with AT24C512 Serial EEPROM.
- One SPI port with AT93C46A EEPROM.
- JTAG connector as per ARM’s 2x10 pin layout, ARM-HJTAG interface compatible.
- Four Potentiometer connected to analog inputs.
- Jumpers for JTAG enable.
- JRST jumper to enable external RESET control by RS232.
- Single power supply: 7V to 12V DC required.
- Power supply filtering capacitor.
- Power supply status LED.
ARM LPC2148 DEVELOPMENT BOARD

FEATURES
- 6/32-bit ARM7TDMI-S microcontroller in a tiny LQFP64 package.
- 8 to 40 kB of on-chip static RAM and 32 to 512 kB of on-chip flash program memory.
- 28 bit wide interface/accelerator enables high speed 60 MHz operation.
- (ISP/IAP) via on-chip bootloader software.
- USB 2.0 with 2 kB of endpoint RAM.
- Single 10-bit D/A converter provides variable analog output.
- Two 32-bit timers/external event counters PWM unit (six outputs).
- Multiple serial interfaces including two UARTs (16C550), two Fast I2C-bus (400 Kbit/s), SPI and SSP with buffering and variable data length capabilities.
- 60 MHz maximum CPU clock available from on-chip PLL with settling time of 100s.
- On-chip integrated oscillator operates with an external crystal range from 1 MHz to 30 MHz and with an external oscillator up to 50 MHz.
- Power saving modes include Idle and Power-down.
- Processor wake-up from Power-down mode via external interrupt, USB, Brown Out Detect (BOD) or Real-Time Clock (RTC).
- CPU operating voltage range of 3.0 V to 3.6 V (3.3 V 10 %)
- Up to 45 of 5 V tolerant fast general purpose I/O pins in a tiny LQFP64 package.

SPARTAN 3E DEVELOPMENT BOARD

FEATURES
- 100,000 gate Xilinx Spartan 3E FPGA;
- JTAG programming port;
- XCF04S Xilinx Platform Flash ROM to store FPGA configurations;
- Large collection of I/Os including eight LEDs and four slide switches;
- LCD and 7 segment displays;
- RS 232 and VGA ports;
- Ethernet port with physical layer controller;
- User-selectable oscillator, plus a socket for a second oscillator;
- 100 pin user I/O and peripheral module connection;
DS PIC DEVELOPMENT BOARD

FEATURES
- 40-pin ZIF socket [MCU]
- 8 Nos. Digital Input
- 4x4 Matrix Keypad
- 8 Nos. Point LEDs
- Serial EEPROM [SPI, I2C]
- 2X16 Character LCD with back light
- 4 Nos. 7-Segment Display
- On-board ADC test [2POT, 1 - LM35 Temp Sensor]
- PS/2 [Keyboard interface], CAN 2.0A
- DS1307 RTC with Battery backup
- UART [RS232, serial communication]
- Buzzer [Alarm]
- 3 Nos. Interrupts for Study, Reset Button

BLACK FIN DEVELOPMENT BOARD

TECHNICAL PARAMETERS
- ADSP-BF532-SBST400  external SRAM 512kB
- power supply 5-12 V DC  external USB port on board linear regulator 3.3V and 1.2V
- socket for external BOOT EEPROM
- FTDI2232C (USB)
- external RESET signal generator
- 8x LED connected to PF pins
- 2x button connected to PF pins
- 1x RESET button
FEA 

** FEATURES **

- NXP’s ARM7TDMI-S LPC2378 microcontroller, 72MHz
- 512KB flash memory, 32KB SRAM
- 16 x 2 characters LCD
- USB host interface & connector
  - Dual CAN interfaces & connectors
  - Dual RS232 interfaces & connectors
- JTAG connector
- SD card memory interface
- 8 LEDs
- 1 Analog inputs
- 1 Speaker output (DAC)
- 2 push-button keys

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** COOL RUNNER XC 2C256 **

** FEATURES **

- The Cool Runner II 256-macrocell.
- JTAG programming port (J10).
- Large collection of I/Os.
- 9 pin RS232 serial port.
- Ethernet port with physical layer controller.
- LCD connector.
- 3 bit, 8 color VGA port.
- 144-pin TQFP with 118 user I/O.
- Multi-voltage I/O operation — 1.5V to 3.3V.
- Extra Jumpers
**ARM 9 TFT DEVELOPMENT BOARD**

**MINI2440 S3C2440 FEATURES**
- CPU - Samsung S3C2440A 400MHz (Max frequency- 533Mhz)
- SDRAM Memory
  - 64 MB SDRAM
  - 32-bit Data Bus width
  - 100 MHz Clock
- FLASH Memory
- 1GB Nand Flash
- 10/100M Ethernet RJ-45(DM9000)
- 3 Serial Ports (One RS232 with CTS and RTS)
  - One USB Host
- Oscillator
  - 12 MHz
- RTC
- LCD
- 4 wire resistive Touch Screen

**8051 DEVELOPMENT BOARD VER1**

**FEATURES**
- 89v51RD2 Flasher through RS232 using Flash magic Software
- On board Regulated Power Supply 5v, 12v supplys
- A Serial Port for ISP
- An RS232 Serial Port
- 7Seg Multiplexed Display
- DC Power Supply Connector(12v Ac or Dc)
- Rdy Interfac For LCD display 2linex16Character
- 24Cxx I2C EEPROM
- RTC DS1307
- 8 LED array
- Matrix Key Pad
ATMEG128 PROTOTYPE BOARD

FEATURES

- ATmega128-16AI with 128K Bytes Program Flash, 4K Bytes data EEPROM, 4K Bytes RAM
- ISP Socket for Flashing thru AVR Dude and AVR Prog
- On board Regulated Power Supply 5v, 12v supplys
- An RS232 Serial Port
- 16 Mhz crystall oscillator power supply filtering capacitor
- RS232 interface circuit with Tx, Rx signals
- RS232 DB9 female connectors

PIC BOARDS

PIC ONBOARD FEATURES

- 40-pin MCU
- DC Motor Driver
- Two Relay
- UART(RS232, serial communication
ARM 9 BOARD

FEATURES

- **EEPROM:** 1024 Byte (I2C)
- **Ext. Memory:** SD-Card socket
- **Serial Ports:** 3x DB9 connector (RS232)
- **USB:** 4x USB-A Host, 1x USB-B Device
- **Audio Output:** 3.5 mm stereo jack
- **Ethernet:** RJ-45 10/100M (DM9000)
- **RTC:** Real Time Clock with battery
- **Camera:** 20 pin Camera interface (2.0 mm)
- **User Inputs:** 6x push buttons and 1x A/D pot
- **Power:** 5V connector, power switch and LED

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ARM 2148 BOARD

FEATURES OF THE BOARD:

- 3.3V input power supply,
- 2 on board UART,
- power on indicator,
- 20 pin JTAG support,
- Reset switch,
- USB(2.0)full speed USB protocol,
- Extension pins for I/O headers,
- On board voltage regulator 3.3v with up to 800mA current.
**RABBIT WIFI BOARD**

**FEATURES**

- Rabbit® 5000 running at 74 MHz
- On-board single-chip 802.11b/g transceiver
- Up to 35 GP I/O lines and six serial ports
- 1 MB SRAM and 1 MB serial flash memory
- Built-in web server
- Certified to meet FCC and other international regulatory requirements
- Easy-to-use integrated design environment

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**PIC WEB SERVER**

**FEATURES**

- Web server with HTML support,
- Microchip free TCP/IP stack support
- 2 x Ethernet interface (RJ-45 connector),
- PICtail™ connector for future expansion boards,
- 16 x 2 character alpha-numeric LCD display,
- Programmable buttons/LEDs,
- Temp sensor,
- RS-232/RS-485 interface,
- Real time clock
## DEVELOPMENT BOARD

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC Development Board</td>
<td>1500</td>
</tr>
<tr>
<td>AVR Atmega8 Development Board</td>
<td>1200</td>
</tr>
<tr>
<td>AVR At mega 128 Development Board</td>
<td>1900</td>
</tr>
<tr>
<td>ARM 2129 Development Board</td>
<td>2400</td>
</tr>
<tr>
<td>ARM 2148 development board</td>
<td>2600</td>
</tr>
<tr>
<td>Spartan 3E Development Board</td>
<td>7000</td>
</tr>
<tr>
<td>DS PIC Development Board</td>
<td>2600</td>
</tr>
<tr>
<td>Black Fin Development Board</td>
<td>11000</td>
</tr>
<tr>
<td>ARM 2378 Advanced Board</td>
<td>3000</td>
</tr>
<tr>
<td>Cool Runner XC 2C256 Board</td>
<td>5000</td>
</tr>
<tr>
<td>ARM 9 TFT development board</td>
<td>9000</td>
</tr>
<tr>
<td>8051 development board ver1</td>
<td>1400</td>
</tr>
</tbody>
</table>

## PROTOTYPE

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMEG 128 board</td>
<td>900</td>
</tr>
<tr>
<td>DSPIC boards</td>
<td>1000</td>
</tr>
<tr>
<td>PIC boards type 1</td>
<td>450</td>
</tr>
<tr>
<td>PIC board type 2</td>
<td>550</td>
</tr>
<tr>
<td>PIC board type 3</td>
<td>500</td>
</tr>
<tr>
<td>ARM 9 board</td>
<td>6000</td>
</tr>
<tr>
<td>Cool runner XC9572 board</td>
<td>1000</td>
</tr>
<tr>
<td>ARM 2148 board</td>
<td>1500</td>
</tr>
<tr>
<td>ATMEG 8 board</td>
<td>400</td>
</tr>
<tr>
<td>8051 board</td>
<td>1200</td>
</tr>
</tbody>
</table>

## OEM MODULE

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zigbee Microchip Module</td>
<td>1100</td>
</tr>
<tr>
<td>Zigbee Max stream module</td>
<td>1250</td>
</tr>
<tr>
<td>GSM Modem</td>
<td>2600</td>
</tr>
<tr>
<td>GSM/GPRS modem</td>
<td>2900</td>
</tr>
<tr>
<td>GPS receiver Kit</td>
<td>3000</td>
</tr>
<tr>
<td>Blue Tooth Module</td>
<td>2900</td>
</tr>
<tr>
<td>Rabbit Wifi Board</td>
<td>7500</td>
</tr>
<tr>
<td>Microchip WiFi board</td>
<td>5500</td>
</tr>
</tbody>
</table>

## ACCESSORIES

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC Parallel Programmer</td>
<td>400</td>
</tr>
<tr>
<td>Stepper motor control</td>
<td>600</td>
</tr>
<tr>
<td>Finger print reader(USB type)</td>
<td>3700</td>
</tr>
<tr>
<td>PIC 2 debugger</td>
<td>1200</td>
</tr>
<tr>
<td>Finger print reader(Serial type)</td>
<td>5000</td>
</tr>
</tbody>
</table>

## PROJECT BOARD (WITH BOARD)

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustable Power Supply</td>
<td>200</td>
</tr>
<tr>
<td>Stepper Motor (Tip 122) Board</td>
<td>450</td>
</tr>
<tr>
<td>Keypad (4x4) Matrix</td>
<td>200</td>
</tr>
<tr>
<td>7 Segment Display</td>
<td>250</td>
</tr>
<tr>
<td>RTC Board</td>
<td>150</td>
</tr>
<tr>
<td>RF Board (RF/TX)</td>
<td>475</td>
</tr>
<tr>
<td>Load Cell Sensor</td>
<td>950</td>
</tr>
<tr>
<td>Vibration sensor (mems)</td>
<td>1200</td>
</tr>
<tr>
<td>Battery Charging ckt</td>
<td>400</td>
</tr>
<tr>
<td>Vibration sensor (pizeo electric sensor)</td>
<td>500</td>
</tr>
<tr>
<td>Ultrasonic obstacle sensor</td>
<td>475</td>
</tr>
<tr>
<td>Ultrasonic distance meter</td>
<td>950</td>
</tr>
<tr>
<td>Smoke sensor</td>
<td>350</td>
</tr>
<tr>
<td>IR sensor (2 set)</td>
<td>350</td>
</tr>
<tr>
<td>Proximetric sensor</td>
<td>600</td>
</tr>
<tr>
<td>Humidity Sensor</td>
<td>600</td>
</tr>
<tr>
<td>Pressure Sensor</td>
<td>1300</td>
</tr>
<tr>
<td>Lab view Serial Interface</td>
<td>500</td>
</tr>
<tr>
<td>Lab view Parallel Interface</td>
<td>500</td>
</tr>
<tr>
<td>Chopper circuit</td>
<td>1250</td>
</tr>
<tr>
<td>DC motor control</td>
<td>800</td>
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<tr>
<td>Cyclo converter</td>
<td>1400</td>
</tr>
<tr>
<td>NO.</td>
<td>COMPONENTS</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
</tr>
<tr>
<td>23</td>
<td>Inverter ckt ver 1</td>
</tr>
<tr>
<td>24</td>
<td>Inverter ckt ver 2</td>
</tr>
<tr>
<td>25</td>
<td>Hbridge</td>
</tr>
<tr>
<td>26</td>
<td>DC-DC converter</td>
</tr>
<tr>
<td>27</td>
<td>Frequency to voltage converter</td>
</tr>
<tr>
<td>28</td>
<td>Induction motor control</td>
</tr>
<tr>
<td>29</td>
<td>3 phase induction motor</td>
</tr>
<tr>
<td>30</td>
<td>2 channel relay</td>
</tr>
<tr>
<td>31</td>
<td>4 channel relay</td>
</tr>
<tr>
<td>32</td>
<td>Accelerometer sensor (Mems)</td>
</tr>
<tr>
<td>33</td>
<td>Strain guage (sensor)</td>
</tr>
<tr>
<td>34</td>
<td>Current sensor board</td>
</tr>
<tr>
<td>35</td>
<td>Level sensor</td>
</tr>
<tr>
<td>36</td>
<td>Voice record and play back</td>
</tr>
<tr>
<td>37</td>
<td>RTD Temperature sensor board</td>
</tr>
<tr>
<td>38</td>
<td>PIR sensor</td>
</tr>
<tr>
<td>39</td>
<td>Heart beat sensor</td>
</tr>
<tr>
<td>40</td>
<td>Wind speed sensor</td>
</tr>
<tr>
<td>41</td>
<td>7 channel relay</td>
</tr>
<tr>
<td>42</td>
<td>RF wireless camera</td>
</tr>
<tr>
<td>43</td>
<td>AC to DC converter</td>
</tr>
</tbody>
</table>

**MECHANICAL DESIGN**

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pneumatic Compressor Design</td>
<td>7000</td>
</tr>
<tr>
<td>2. 4 Wheels Motoring Car</td>
<td>5000</td>
</tr>
<tr>
<td>3. Hydraulic</td>
<td>6000</td>
</tr>
<tr>
<td>4. Bottle Filling Design</td>
<td>2500</td>
</tr>
<tr>
<td>5. 7-9 Feet Wind Mill</td>
<td>8000</td>
</tr>
<tr>
<td>6. Foot Step</td>
<td>3500</td>
</tr>
<tr>
<td>7. Wind turbine design</td>
<td>6000</td>
</tr>
<tr>
<td>8. Thermal wind power</td>
<td>4000</td>
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</tbody>
</table>

**ROBOTICS**

<table>
<thead>
<tr>
<th>S. COMPONENTS</th>
<th>PRIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Walking Robot</td>
<td>6000</td>
</tr>
<tr>
<td>2. Moving Robo</td>
<td>900</td>
</tr>
<tr>
<td>3. Step Climbing Robo</td>
<td>2500</td>
</tr>
<tr>
<td>4. Wall Climbing Robo</td>
<td>10000</td>
</tr>
<tr>
<td>5. Pick and Place</td>
<td>3000</td>
</tr>
<tr>
<td>6. Linear /vertical moving robot</td>
<td>2750</td>
</tr>
<tr>
<td>7. Humanoid Robo</td>
<td>15000</td>
</tr>
</tbody>
</table>

**IEEE 2010/2009 TECHNOLOGY WISE TOPICS**

**AUTOMATION**

1. Application of Genetic Algorithms to Solve the Multidepot Vehicle Routing Problem
2. DC/DC Converter for the International Space Station
3. Direction Sensing RFID Reader for Mobile Robot Navigation
4. Detecting Human Behavior Models From Multimodal Observation in a Smart Home
5. Environmental-Adaptive RSSI-Based Indoor Localization
6. Feature for Distinguishing Propeller-Driven Airplanes from Turbine-Driven Airplanes
7. Robust Location-Aware Activity Recognition Using Wireless Sensor Network in an Attentive Home
8. Unaugmented GPS-Based Flight Inspection System
9. Design of an Automotive Traffic Sign Recognition System
10. Optimization of Group Elevator Scheduling With Advance Information
12. Speed Observation and Position Feedback Stabilization of Partially Linearizable Mechanical Systems
14. A Stationary System for non contact temperature Measurement and Hot Box detecting
15. Smart Sensors Network for Air Quality Monitoring Applications

**AEROSPACE**

1. Direction Cosine Matrix Estimation from Vector Observations using a Matrix Kalman Filter
2. Data Compression for Multi-Parameter Estimation for Emitter Location
3. COTS-Based Wireless Magnetic Sensor for Small Satellites
5. Towards an Automatic Face Indexing System for Actor-based Video Services in an IPTV Environment
6. Spacial Extrapolation-Based Blind DOA Estimation Approach for Closely Spaced Sources
7. Effect of Rain Attenuation on Range Weighting in Weather Radar
8. Fully Automatic Computation of Diagonal Loading Levels for Robust Adaptive Beam forming
9. Adaptive Mobile Sensor Positioning for Multi-Static Target Tracking

**AUTOMOBILE**

1. Active Suspension Control With Direct-Drive Tubular Linear Brushless Permanent-Magnet Motor
2. Braking Force Distribution Strategy for HEV Based on Braking Strength
3. Design of a Dependable Model Vehicle for Rear-End Collision Avoidance and Its Evaluation
4. Application of Reverse Engineering in the Inner Decoration Mold of Automobile Ceiling
5. Design of a Magneto-rheological Fluid Clutch Based on Electromagnetic Finite Element Analysis
6. Development of 42V Automobile Brushless Alternator with Combined Stator
7. Photogrammetric 3D Measurement Method Applying to Automobile Panel
8. PID Controller Design for Semi-Active Car Suspension Based on Model from Intelligent System Identification
9. Diesel PM Collection for Marine and Automobile Emissions using EHD Electrostatic Precipitators
10. Research of Hydraulic Impactor with Self-Adaptive Intelligent Buffer
11. Research on Intelligent Hydraulic Impactor System Based on Fuzzy Control
13. Electromagnetic Active Linear Absorber (ALA) System of Engine Vibration in Automobile

**BIOMEDICAL**

1. EEG-Based Emotion Recognition in Music Listening
2. Improving ECG Beats Delineation With an Evolutionary Optimization Process
3. Magnetic Eye Tracking: A New Approach Employing a Planar Transmitter
4. Wavelet-Based ECG Data Compression System With Linear Quality Control Scheme
5. Sensing Power Transfer Between the Human Body and the Environment
6. Thyroid Segmentation and Volume Estimation in Ultrasound Images
7. Nonlinear Bayesian Filtering for Denoising of Electrocardiograms Acquired in a Magnetic Resonance Environment
12. QRS Detection Based on Multiscale Mathematical Morphology for Wearable ECG Devices in Body Area Networks(2009)

COMMUNICATION
1. Variable-Rate M-PSK Communications without Channel Amplitude Estimation
2. Average Power Reduction for MSM Optical Signals via Sparsity and Uncertainty Principle
3. Channel Modeling and Analysis for Wireless Networks in Underground Mines and Road Tunnels
4. Local and Global Hamiltonian Cycle Protection Algorithm Based on Abstracted Virtual Topology in Fault-Tolerant Multi-Domain Optical Networks
5. Performance Analysis of Wireless Hybrid-ARQ Systems with Delay-Sensitive Traffic
6. A Modular Physically Based Approach to the Sound Synthesis of Membrane Percussion Instruments
7. BIC-Based Speaker Segmentation Using Divide-and-Conquer Strategies With Application to Speaker Diarization.
8. Segmentation, Indexing, and Retrieval for Environmental and Natural Sounds
9. Modulation Spectral Features for Robust Far-Field Speaker Identification

CONSUMER ELECTRONICS
1. A Feedback-Based Control Technique for Interactive Live Streaming Systems to Mobile Devices
2. Design and Implementation of Mobile Trusted Module for Trusted Mobile Computing
3. Design and Implementation of an Embedded Home Surveillance System by Use of Multiple Ultrasonic Sensors
4. Towards an Automatic Face Indexing System for Actor-based Video Services in an IPTV Environment
5. Sub-fingerprint Masking for a Robust Audio Fingerprinting System in a Real-noise Environment for Portable Consumer Devices
6. Low Complexity Content-Aware Video Retargeting for Mobile Devices

CONTROL SYSTEM
1. Design and Implementation of an Embedded Home Surveillance System by Use of Multiple Ultrasonic Sensors
2. Control of a 5DOF Magnetically Levitated Positioning Stage
3. A Nonlinear Tracking Controller for Voltage-Fed Induction Motors With Uncertain Load Torque
4. A Real Time Video Data Adjusting Method for Active Matrix Organic Light Emitting Diode Displays with High Image Quality
5. High-Order Sliding-Mode Controllers of an Electropneumatic Actuator: Application to an Aeronautic Benchmark
6. A Reset State Estimator Using an Accelerometer for Enhanced Motion Control With Sensor Quantization
7. Localization Algorithm in Wireless Sensor Networks with Network Mobility
8. Intelligent Decoupling Control of Nonlinear Multivariable Systems and its Application to a Wind Tunnel System
9. High-Performance Control of a Single-Phase Shunt Active Filter
10. Real-Time Control of Variable Air Volume System Based on a Robust Neural Network Assisted PI Controller
11. Nonlinear Tracking Control of 3-D Overhead Cranes Against the Initial Swing Angle and the Variation of Payload Weight
12. Optimal System Design of SISO-Servopneumatic Positioning Drives
13. Robust Force Control of an SRM-Based Electromechanical Brake and Experimental Results
14. Real-Time Motion Planning With Applications to Autonomous Urban Driving
15. Real-Time Discrete Neural Block Control Using Sliding Modes for Electric Induction Motors
16. Robust Nonlinear Model Predictive Control of a Run-of-Mine Ore Milling Circuit
17. Satellite Attitude Control by Quaternion-Based Backstepping
18. A Voice Trigger System using Keyword and Speaker Recognition for Mobile Devices
19. Transient Control of Electro-Hydraulic Fully Flexible Engine Valve Actuation System
20. Stabilization of Automotive Vehicles Using Active Steering and Adaptive Brake Control Allocation

ENERGY CONVERSION

1. Integral Sliding-Mode Direct Torque Control of Doubly-Fed Induction Generators Under Unbalanced Grid Voltage
2. A New Variable-Speed Wind Energy Conversion System Using Permanent-Magnet Synchronous Generator and Z-Source Inverter
3. Load-Tracking Performance of an Autonomous SOFC-Based Hybrid Power Generation/ Energy Storage System
4. Design and Control Strategies of an Induction-Machine-Based Flywheel Energy Storage System Associated to a Variable-Speed Wind Generator
5. Effect of Erroneous Position Measurements in Vector-Controlled Doubly Fed Induction Generator
6. Direct Torque Control for Doubly Fed Induction Machine-Based Wind Turbines Under Voltage Dips and Without Crowbar Protection
7. Z-Source-Inverter-Based Flexible Distributed Generation System Solution for Grid Power Quality Improvement
8. Low-Speed and Standstill Operation of a Sensorless Direct Torque and Flux Controlled IPM Synchronous Motor Drive
10. Reinforced Control and Operation of DFIG-Based Wind-Power-Generation System Under Unbalanced Grid Voltage Conditions
11. Techno-Economic Comparison of Operational Aspects for Direct Drive and Gearbox-Driven Wind Turbines
12. Online Sensorless Induction Motor Temperature Monitoring
15. Sensorless Slowdown Detection Method for Single-Phase Induction Motors

**FUZZY SYSTEMS**

1. A Hybrid Approach for Design of Stable Adaptive Fuzzy Controllers Employing Particle Swarm Optimization
2. Hierarchical Cluster-Based Multi species Particle-Swarm Optimization for Fuzzy-System Optimization
3. Fuzzy Qualitative Human Motion Analysis
4. Fuzzy Clustering With Viewpoints
5. Designing Fuzzy-Rule-Based Systems Using Continuous Ant-Colony Optimization
6. Fuzzy PCA-Guided Robust $k$-Means Clustering
7. Communication-Delay-Distribution-Dependent Networked Control for a Class of T-S Fuzzy Systems
8. Fuzzy Control for Nonlinear Uncertain Electro hydraulic Active Suspensions With Input Constraint
9. Modeling Human Activity From Voxel Person Using Fuzzy Logic

**GEOSCIENCES AND REMOTE SENSING**

1. A New Technique for Temperature and Humidity Profile Retrieval From Infrared-Sounder Observations Using the Adaptive Neuro-Fuzzy Inference System
2. Using Multiscale Spectra in Regularizing Covariance Matrices for Hyper spectral Image Classification
3. Semi supervised Neural Networks for Efficient Hyper spectral Image Classification
4. Soil Surface Water Content Estimation by Full-Waveform GPR Signal Inversion in the Presence of Thin Layers
5. Temperature-Dependable Microwave Dielectric Model for an Arctic Soil
6. Neural Networks for the Prediction of Species-Specific Plot Volumes Using Airborne Laser Scanning and Aerial Photographs
7. Context-Dependent Multi sensor Fusion and Its Application to Land Mine Detection

**INSTRUMENTATION**

1. A Multi sensor Intelligent Device for Real-Time Multiphase Flow Metering in Oil Fields
2. An Automated Instrument for the Measurement of Bark Micro relief
3. Coverage-Mapping Method Based on a Hardware Model for Mobile-Robot Positioning in
4. Intelligent Spaces
5. Biometric Authentication System on Mobile Personal Devices
6. Effective Magnetic Permeability Measurement in Composite Resonator Structures
7. A Ferro fluidic Inertial Sensor Exploiting the Rosensweig Effect
8. A New Method for Measuring the Level Dependence of AC Shunts
9. A Design Approach For Digital Controllers Using Reconfigurable Network-Based Measurements
10. A Combined Inductive–Capacitive Proximity Sensor for Seat Occupancy Detection
11. Mixed Visual Control Method for Robots With Self-Calibrated Stereo Rig
12. Measurement and Defect Detection of the Weld Bead Based on Online Vision Inspection
13. Measurements and Error Sources in Time Transfer Using Asynchronous Fiber Network
14. Monitoring Water Levels and Currents Using Reflected GPS Carrier Doppler Measurements and Coordinate Rotation Model
15. Multi physics Modeling and Analysis of the Photo inductive Imaging Effect
16. for Crack Detection
17. Multimodal Vision–Haptic Perception of Digital Watermarks Embedded in 3-D Meshes
18. Image-Quality-Based Adaptive Face Recognition
19. Improving Biometric Authentication Performance From the User Quality
20. FPGA-Based Multiple-Channel Vibration Analyzer for Industrial Applications in Induction Motor Failure Detection
22. Passive Hybrid MEMS for High-Temperature Telemetric Measurements
23. Pipeline Architecture and Parallel Computation-Based Real-Time Stereovision
24. Tracking System for Surgical Navigation
27. Posture Monitoring System for Context Awareness in Mobile Computing
28. Temperature Measurement Technique for Stabilizing the Light Output of RGB LED Lamps
29. Parameter Selection in Cross-Correlation-Based Velocimetry Using Circular Electrostatic Sensors
30. Unrestrained Measurement of Arm Motion Based on a Wearable Wireless Sensor Network

**IMAGE PROCESSING**

1. Biased Discriminant Euclidean Embedding for Content-Based Image Retrieval
2. Contourlet-Based Image Watermarking Using Optimum Detector in a Noisy Environment
3. Data Embedding in JPEG Bitstream by Code Mapping
4. Block-Based Image Compression With Parameter-Assistant Inpainting
5. Enhanced Local Texture Feature Sets for Face Recognition Under Difficult Lighting Conditions
6. Video Segmentation Based on Motion Coherence of Particles in a Video Sequence Shearlet-Based Deconvolution
7. Perceptual Image Hashing Based on Virtual Watermark Detection
8. Texture Classification by Modeling Joint Distributions of Local Patterns With Gaussian Mixtures
9. Accurate and Efficient Method for Smoothly Space-Variant Gaussian Blurring
10. Cells Segmentation From 3-D Confocal Images of Early Zebrafish Embryogenesis
11. Spherical Coding algorithm for Wavelet Image Compression
12. Robust Text-Line and word Segmentation for Handwritten Document Images
13. A Fingertip Detection and Tracking System as a Virtual Mouse, a Signature Input Device and an Application Selector
15. Hand written Farsi Character Recognition using Artificial Neural Networks
16. Novel vision based finger writing character Recognition System
18. Fingertip Detection and Tracking System as a virtual Mouse, Signature Input Device and an Application Selector(2009)
19. Exploiting Motion Correlations in 3-D Articulated Human Motion Tracking (2009)

INDUSTRIAL

1. A Low-Power Stand-Alone Adaptive Circuit for Harvesting Energy From a Piezoelectric Micro power Generator
2. A Novel Current-Fed Boost Converter With Ripple Reduction for High-Voltage Conversion Applications
4. A Novel PWM Control Method for Hybrid-Clamped Multilevel Inverters
5. Adaptive Neural Network Control of a Self-Balancing Two-Wheeled Scooter
7. An Intelligent Longitudinal Controller for Application in Semiautonomous Vehicles
8. Design Improvement of a Single-Phase Brushless Permanent Magnet Motor for Small Fan Appliances
9. Direct Neural-Network Hardware-Implementation Algorithm
10. Back EMF Sensor less-Control Algorithm for High-Dynamic Performance PMSM
11. Energy Harvesting From Piezoelectric Materials Fully Integrated in Footwear
12. Group Connectivity Model for Industrial Wireless Sensor Networks
13. Force Control of Human–Robot Interaction Using Twin Direct-Drive Motor System Based on Modal Space Design
14. Human-Observation-Based Extraction of Path Patterns for Mobile Robot Navigation
15. Energy Harvesting From Vibration With Alternate Scavenging Circuitry and Tapered Cantilever Beam
16. Internal Permanent Magnet Motor Design for Electric Vehicle Drive
17. Multifunctional Intelligent Autonomous Parking Controllers for Car like Mobile Robots
18. A Single-Stage Soft-Switching Fly back Converter for Power-Factor-Correction Applications
19. Precision Control and Compensation of Servomotors and Machine Tools via the Disturbance Observer
20. Real-Time Simulation of a Wind Turbine Generator Coupled With a Battery Super capacitor Energy Storage System
21. Online Parameter Estimation and Adaptive Control of Permanent-Magnet Synchronous Machines
22. Rapid Prototyping of Graphical User Interfaces for Petri-Net-Based Controllers
24. Multi-String Five-Level Inverter with Novel PWM Control Scheme for PV Application
25. Remedial Brushless AC Operation of Fault-Tolerant Doubly Salient Permanent-Magnet Motor Drives
26. Design & Implementation Of Model Predictive Control For Electrical Motor Drives

**KNOWLEDGE AND DATA ENGINEERING**

1. A Game-Theoretic Approach for Simultaneous Compaction and Equipartitioning of Spatial Data Sets
2. Deriving Concept-Based User Profiles from Search Engine Logs
4. Exploring Correlated Subspaces for Efficient Query Processing in Sparse Databases
5. Knowledge-Based Interactive Post Mining of Association Rules Using Ontologies
6. An Efficient and Privacy-Aware Monitoring Framework for Continuously Moving Objects
7. Structural and Role-Oriented Web Service Discovery with Taxonomies in OWL-S
8. Efficient Tree Structures for High Utility Pattern Mining in Incremental Databases
9. Reengineering of ERP System Based on Data Mining
10. Truth Discovery with Multiple Conflicting Information Providers on the Web
11. Clustering and Sequential Pattern Mining of Online Collaborative Learning Data
12. Effective and Efficient Query Processing for Video Subsequence Identification
13. A Divide-and-Conquer Approach for Minimum Spanning Tree-Based Clustering
14. Web user Session Inference by Means of Clustering Techniques

**MOBILE COMPUTING**

1. Relay Node Deployment Strategies in Heterogeneous Wireless Sensor Networks
2. Stochastic Traffic Engineering in Multi-hop Cognitive Wireless Mesh Networks
4. TDMA Scheduling with Optimized Energy Efficiency and Minimum Delay in Clustered Wireless Sensor Networks
5. Secure Distance-Based Localization in the Presence of Cheating Beacon Nodes
7. Adaptive Resource Allocation for MIMO-OFDM Based Wireless Multicast Systems
9. A Hybrid Reliable Routing Technique (HRR) for Wireless Sensor Network
10. A Mobility-Prediction-Based Relay Deployment Framework for Conserving Power in MANETs
11. A Neural Network Model to Minimize the Connected Dominating Set for Self-Configuration of Wireless Sensor Networks
13. Random Cast: An Energy-Efficient Communication Scheme for Mobile Ad Hoc Networks
14. Bandwidth-Satisfied Multicast Trees in MANETs
15. Communication Coverage in Wireless Passive Sensor Networks
16. Distributed Algorithm for En Route Aggregation Decision in Wireless Sensor Networks
17. Fast IP Network Recovery using Multiple Routing Configurations
18. Message Authentication in Computationally Constrained Environments
19. mSCTP for Soft Handover in Transport Layer
20. Multicasting with Localized Control in Wireless Ad Hoc Networks
22. On Selfish Routing in Internet-Like Environments
23. Topology Control in Wireless Sensor Networks
24. A Distributed Algorithm for Maximum Lifetime Routing in Sensor Networks with Mobile Sink

**Mechatronics**

1. A 6-DOF Gait Rehabilitation Robot With Upper and Lower Limb Connections That Allows Walking Velocity Updates on Various Terrains
2. A Novel Low-Power Linear Magnetostrictive Actuator With Local Three-Phase Excitation
3. Development and Assessment of a Novel Decoupled XY Parallel Micro positioning Platform
4. Inverse Double NARX Fuzzy Modeling for System Identification
5. Linear Parameter-Varying Iterative Learning Control With Application to a Linear Motor System
6. A Smart Sensing Unit for Vibration Measurement and Monitoring
7. Nonlinear Feedback Control of a Bearingless Brushless DC Motor
8. Omni directional Steering Interface and Control for a Four-Wheel Independent Steering Vehicle
9. Tele operation of a Mobile Robot Using a Force-Reflection Joystick With Sensing Mechanism of Rotating Magnetic Field
10. System Identification of a Model Ship Using System a Mechatronics.

**NETWORKING**

1. A Dynamic En-route Filtering Scheme for Data Reporting in Wireless Sensor Networks
2. A Gossiping Protocol for Detecting Global Threshold Crossings
4. Approximation Algorithms for Minimum Energy Transmission Scheduling in Rate and Duty-Cycle Constrained Wireless Networks
5. Constrained Relay Node Placement in Wireless Sensor Networks
6. Distributed Resource Sharing in Low-Latency Wireless Ad Hoc Networks
7. Efficient and Dynamic Routing Topology Inference From End-to-End Measurements
8. Distributed Cross-Layer Algorithms for the Optimal Control of Multihop Wireless Networks
10. A Simple and Efficient hidden markov model scheme for host based anomaly Intrusion detection
11. Intrusion detection
12. A Simple and Efficient Hidden Markov Model Scheme for Host-Based Anomaly Intrusion Detection
13. Analysis of Shortest Path Routing for Large Multi-Hop Wireless Networks
14. A Divide-and-Conquer Approach for Minimum Spanning Tree-Based Clustering
15. Toward a Fuzzy Domain Ontology Extraction Method for Adaptive e-Learning
17. Detecting VoIP calls hidden in web traffic
18. High-Bandwidth Network Memory System Through Virtual Pipelines
19. Scalable Network-Layer Defense Against Internet Bandwidth-Flooding Attacks
20. Distributed Iterative Optimal Resource Allocation With Concurrent Updates of Routing and Flow Control Variables
21. A Directory Service for Perspective Access Networks

**NEURAL NETWORKS**

1. Novel Maximum-Margin Training Algorithms for Supervised Neural Networks
2. Neural-Fuzzy Network Controllers for the Sagittal Balance of a Biped Robot
3. Conformation-Based Hidden Markov Models: Application to Human Face Identification
4. Novel Maximum-Margin Training Algorithms for Supervised Neural Networks
5. Neural Network Technique for Proactive Password Checking
7. Recurrent-Neural-Network-Based Boolean Factor Analysis and Its Application to Word Clustering
8. Adaptive Neural Control for a Class of Nonlinear Systems With Uncertain Hysteresis Inputs and Time-Varying State Delays
9. Neural Network Control of Multifingered Robot Hands Using Visual Feedback
10. Finding Features for Real-Time Premature Ventricular Contraction Detection Using a Fuzzy Neural Network System

**PARALLEL AND DISTRIBUTED COMPUTING**

1. Correlation-Based Traffic Analysis Attacks on Anonymity Networks
3. Energy-Efficient Wake-Up Scheduling for Data Collection and Aggregation
4. Minimum Connected Dominating Set Using a Collaborative Cover Heuristic for Ad Hoc Sensor Networks
5. Automated Anomaly Identification in Large-Scale Systems
6. A Reliable Communication Anomaly Identification Protocol for Multiregion Mobile Agent Environments

**POWER DELIVERY**

1. Current Interruption in Low-Voltage Circuit Breakers
2. Improvement of the Electric Power Quality Using Series Active and Shunt Passive Filters
3. Noise Resistant OFDM for Power-Line Communication Systems
4. Extended Real Model of Kalman Filter for Time-Varying Harmonics Estimation
5. Design of a Robust State Feedback Controller for a STATCOM Using a Zero Set Concept
6. Real-Time Voltage Regulation in Power Distribution System Using Fuzzy Control
7. Power Line Communication in Motor Cables of Inverter-Fed Electric Drives
8. On Power Quality of Variable-Speed Constant-Frequency Aircraft Electric Power Systems
9. A Scalable Power-Line-Signaling-Based Scheme for Islanding Detection of Distributed Generators
10. Denoising Techniques With Change-Point Approach for Wavelet-Based Power-Quality Monitoring
11. FPGA-Based Real-Time EMTP
12. Greedy Reconfiguration Algorithms for Medium-Voltage Distribution Networks
13. On Reed–Solomon Coding for Data Communications Over Power-Line Channels
14. Sensorless Current Control of Three-Phase Inverter-Based Distributed Generation

**POWER ELECTRONICS**

1. A Dynamic LVRT Solution for Doubly Fed Induction Generators
2. A Modified SEPIC Converter for High-Power-Factor Rectifier and Universal Input Voltage Applications
3. A High-Efficiency AC/DC Converter With Quasi-Active Power Factor Correction
4. A Transformerless Hybrid Active Filter Using a Three-Level Pulsewidth Modulation (PWM) Converter for a Medium-Voltage Motor Drive
5. A Wide-Input–Wide-Output (WIWO) DC–DC Converter
6. An Adaptive Control Strategy for DSTATCOM Applications in an Electric Ship Power System
7. A ZCS Full-Bridge Converter Without Voltage Overstress on the Switches
8. A Soft-Switching DC/DC Converter With High Voltage Gain
10. Hybrid Buck–Boost Feedforward and Reduced Average Inductor Current Techniques in Fast Line Transient and High-Efficiency Buck–Boost Converter
11. An Input Power Factor Control Strategy for High-Power Current-Source Induction Motor Drive With Active Front-End
12. Analysis, Design, and Control of Bidirectional Cascoded Configuration for a Fuel Cell Hybrid Power System
13. Digital Sliding-Mode Controller For High-Frequency DC/DC SMPS
15. Direct Torque Control of an IPM-Synchronous Motor Drive at Very Low Speed Using a Sliding-Mode Stator Flux Observer
16. Direct Torque Control of Four-Switch Brushless DC Motor With Non-Sinusoidal Back EMF
17. An Integral Battery Charger With Power Factor Correction for Electric Scooter
18. Digital Average Current Controlled Switching DC–DC Converters With Single-Edge Modulation
19. Model-Based Predictive Direct Power Control of Doubly Fed Induction Generators
20. Rotor Voltage Dynamics in the Doubly Fed Induction Generator During Grid Faults
21. Modeling and Small-Signal Analysis of a Switch-Mode Rectifier With Single-Loop Current Sensorless Control
22. Power Factor Correction Without Current Sensor Based on Digital Current Rebuilding
23. PWM Dead Time Optimization Method for Automotive Multiphase DC/DC-Converters
24. Efficiency Optimization Control of Single-Phase Induction Motor Drives
25. A Real-Time Thermal Model of a Permanent-Magnet Synchronous Motor
26. Zero-Voltage-Transition PWM Converters With Synchronous Rectifier
27. Single-Phase to Single-Phase Full-Bridge Converter Operating With Reduced AC Power in the DC-Link Capacitor
28. Turn-ON Performance of Reverse Blocking IGBT (RB IGBT) and Optimization Using Advanced Gate Driver
29. Steady-State Stability of Current Mode Active-Clamp ZVS DC–DC Converters
30. Step-up DC–DC converter by coupled inductor and voltage-lift technique
34. Design of a back to back NPC converter interface for wind turbine with squirrel cage induction motor (2008)
35. Incorporating control trajectories with the direct torque control scheme of interior permanent magnet synchronous motor drive (2009)
37. A Fast Switching Method for PM Synchronous Motor Speed Control

POWER SYSTEM

1. A Hybrid Network Model for Small Signal Stability Analysis of Power Systems
2. An Efficient Algorithm for QCDP and Implementation – programming /simulation
3. An Assessment of the Impact of Wind Generation on System Frequency Control —sp
4. A Novel Approach to Interarea Oscillation Damping by Unified Power Flow Controllers Utilizing Ultracapacitors
6. Calculating Steady-State Operating Conditions for Doubly-Fed Induction Generator Wind Turbines
7. Analysis of a Distributed Grid-Connected Fuel Cell During Fault Conditions
8. Application of Grey Correlation Analysis in Evolutionary Programming for Distribution System Feeder Reconfiguration
9. Composite Loads in Stand-Alone Inverter-Based Microgrids—Modeling Procedure and Effects on Load Margin
10. ARIMA-Based Time Series Model of Stochastic Wind Power Generation
11. Design and Analysis of a Controller for a Converter Interface Interconnecting an Energy Storage With the DC Link of a VSC
12. Improvement of Stability and Load Sharing in an Autonomous Microgrid Using Supplementary Droop Control Loop
13. Including Magnetic Saturation in Voltage-Behind-Reactance Induction Machine Model for EMTP-Type Solution
15. Transmission Loss Allocation Algorithm Using Path-Integral Based on Transaction Strategy
16. Supply Adequacy Assessment of Distribution System Including Wind-Based DG During Different Modes of Operation
17. Probabilistic Methodologies for Determining the Optimal Number of Substation Spare Transformers
18. Power-Synchronization Control of Grid-Connected Voltage-Source Converters
20. Short-Term Load Forecasting Using Fuzzy Inductive Reasoning and Evolutionary Algorithms —SP
21. Steady-State Solution for Power Networks Modeled at Bus Section Level

**RENEWABLE ENERGY**

1. Efficient control scheme of wind turbines with doubly fed induction generators for low voltage ride-through capability enhancement
2. Harmonic assessment of variable-speed wind turbines considering a converter control malfunction
3. Improved current regulation of three-phase grid-connected voltage-source inverters for distributed generation systems
4. Reliability assessment of a wind-power system with integrated energy storage
5. Statistical voltage quality assessment method for grids with wind power generation
6. Magnitude and frequency control of grid-connected doubly fed induction generator based on synchronized model for wind power generation
**ROBOTICS**

1. 1T2R Parallel Mechanisms Without Parasitic Motion
2. Actively Controlled Manipulation of a Magnetic Microbead Using Quadrupole Magnetic Tweezers
4. Autonomous Robotic Pick-and-Place of Microobjects
5. Compliant Control of Multicontact and Center-of-Mass Behaviors in Humanoid Robots
6. Coordinated Kinematic Control of Compliantly Coupled Multirobot Systems in an Array Format
7. Human-Intent Detection and Physically Interactive Control of a Robot Without Force Sensors
8. Flat Dry Elastomer Adhesives as Attachment Materials for Climbing Robots
9. Global Manipulation Planning in Robot Joint Space With Task Constraints
10. Time Parameterization of Humanoid-Robot Paths
11. Shortest Paths for a Robot With Nonholonomic and Field-of-View Constraints
12. Kinematic-Parameter Identification for Serial-Robot Calibration Based on POE Formula

**SOFTWARE ENGINEERING / SECURE COMPUTING**

1. A Framework for Programming Robust Context-Aware Applications
2. Software Reliability and Testing Time Allocation: An Architecture-Based Approach
3. FACTS: A Framework for Fault-Tolerant Composition of Transactional Web Services
4. Ontology Classification for Semantic-Web-Based Software Engineering
5. Context-Based Matching and Ranking of Web Services for Composition
6. An Efficient Key Management Scheme for Secure Data Access Control in Wireless Broadcast Services
7. Web-Referral Architectures to Mitigate Denial-of-Service Threats
10. Towards Identifying Usability And Security Features Of Graphical Password In Knowledge Based Authentication Technique
11. Biometrics authentication for border control Application

**SIGNAL PROCESSING**

1. Decentralized Sparse Signal Recovery for Compressive Sleeping Wireless Sensor Networks
2. A Direct Approach for the Frequency-Adaptive Feed forward Cancellation of Harmonic Disturbances
3. Autoregressive Modeling of Temporal/Spectral Envelopes With Finite-Length Discrete Trigonometric Transforms
4. An Online Swallow Detection Algorithm Based on the Quadratic Variation of Dual-Axis Accelerometry
5. Cooperative Diversity of Spectrum Sensing for Cognitive Radio Systems
6. An Impulse Response Function for Evaluation of UWB SAR Imaging
7. Weight Optimization for Consensus Algorithms With Correlated Switching Topology
8. Generalized Prolate Spheroidal Wave Functions Associated With Linear Canonical Transform
9. Practical Timing and Frequency Synchronization for OFDM-Based Cooperative Systems
10. Differential Modulation for Bidirectional Relaying With Analog Network Coding
11. Distributed Wireless Sensor Network Localization Via Sequential Greedy Optimization Algorithm
12. Distributed Estimation of Channel Gains in Wireless Sensor Networks
13. Energy Efficient Multi-Object Tracking in Sensor Networks
14. Maximally Robust 2-D Channel Estimation for OFDM Systems

VLSI

1. A Low-Area Multi-Link Interconnect Architecture for GALS Chip Multiprocessors
2. Design Space Exploration of Hard-Decision Viterbi Decoding: Algorithm and VLSI Implementation
3. Design of High-Throughput Fully Parallel LDPC Decoders Based on Wire Partitioning
5. An Efficient 4-D 8PSK TCM Decoder Architecture
6. An Efficient Multimode Multiplier Supporting AES and Fundamental Operations of Public-Key Cryptosystems
7. A New VLSI Architecture of Parallel Multiplier–Accumulator Based on Radix-2 Modified Booth Algorithm
8. A Low-Cost VLSI Implementation for Efficient Removal of Impulse Noise
10. Throughput Optimization for Area-Constrained Links With Crosstalk Avoidance Methods
11. Power Estimation of Embedded Multiplier Blocks in FPGAs
12. Interframe Bus Encoding Technique and Architecture for MPEG-4 AVC/H.264 Video Compression
13. A Novel Architecture for Block Interleaving Algorithm in MB-OFDM Using Mixed Radix System
14. Low Memory and Low Complexity VLSI Implementation of JPEG2000 Codec
15. Using Data Compression for Increasing Memory System Utilization
16. Parallel Interleavers Through Optimized Memory Address Remapping
17. Implementation of Obstacle Avoidance and ZigBee Control Functions for Omni Directional Mobile Robot
19. FPGA-Based Real-Time EMTP(2009)
22. Low Power Design of pre computation-Based Content-Addressable Memory. (2009)
24. Deviation-Based LFSR Reseeding for Test-Data Compression(2009)
27. An Automatic Test Pattern Generator for Minimizing Switching Activity During Scan Testing Activity(2009)
29. Bit-Swapping LFSR and Scan-Chain Ordering: A Novel Technique for Peak- and Average-Power Reduction in Scan-Based BIST(2009)
30. A Low Power Low Area Multiplier based on Shift and Add Architecture(2009)

WEB SERVICES / SECURITY
1. Automatic ID and Data Capture for Rail Freight Asset Management
2. Multi Fingerprint Information Fusion for Personal Identification
4. Prioritizing Vulnerability Remediation by Determining Attacker-Targeted Vulnerabilities
5. Relation based Page Rank Algorithm for Semantic Web search engine Service Mining on the Web
6. A Privacy Preserving Repository for Data Integration across Data Sharing Services
7. Performance Problem Prediction in Transaction based e-business Systems
8. Change Priority Determination in IT Service Management based on risk exposure

LABVIEW
1. A Power Harmonic Measurement System Based on Wavelet Packet Transform and ARM9
2. Design for Battery Energy Manage System Based on LabVIEW
3. Development of Ultrasonic Wave Testing System Based on Virtual Instrument
5. Labview Based Mobile Robot Navigation System
6. Mobile Gas Sensor and Source Detector
7. Remote Laboratory Data Management System Based on LabVIEW
8. Research on the automatic detection system for cracked egg based on Labview
9. Using LEGO NXT Mobile Robots with LabVIEW for Undergraduate Courses on Mechatronics.

Embedded Communication (GPS/WIFI/GSM/CAN/RFID)
1. PARSECS: A Predictable Data Communication System for Smart Sensors and Hard Real-Time Applications
2. Cooperative Object Tracking and Composite Event Detection with Wireless Embedded Smart Cameras
3. Accelerometer based transportation mode recognition on mobile phones
4. An embedded electric meter based on Bluetooth data acquisition system
5. Compressive Sensing Based Positioning Using RSS of WLAN Access Points
6. Anomaly Detection in University Campus WiFi Zones
7. CAN Bus Application in Automotive Network Control
8. Content Dependent Data Hiding on GSM Full Rate Encoded Speech
9. A Mobile GPRS-Sensors Array for Air Pollution Monitoring
10. Design of Automatic Meteorological Data Acquisition System Based on ARM and CAN Bus
11. Design and Research on Air Conditioning Control Network of Electric Vehicle Based on CAN-bus
12. Design of ARM-based Embedded Ethernet Interface
14. Design of Intelligent Patrolling System Based on Wireless Networks
15. Design and Implementation of an Embedded Mobile Navigation System
16. Design and Implementation of an Embedded VoIP System using Bluetooth Technique
17. Microcontroller Based Neural Network Controlled Low Cost Autonomous Vehicle
18. Development of a Batteryless Sensor Transmitter
19. Distributed Remote Temperature Monitoring and Acquisition System Based on CAN Bus
20. GPS-GSM Integration for Enhancing Public Transportation Management Services
21. The Design of PROFIBUS-DP and CAN Bus Communications Unit in Drilling Rig Control System
22. Extending Access Point Connectivity through Opportunistic Routing in Vehicular Networks
23. Map Generation System with Lightweight GPS Trace Data
24. Latency of Web Service in Health Care System Using GSM Networks
25. Inkjet Printing of Dual Band Conformal Antenna for Use in Wifi Frequency Bands
26. Design of the Measurement Node of the Grain Quantity Monitoring System Based on the CAN-bus
27. The Hardware Design of Dual-mode Wireless Video Surveillance System Based on DM6437
28. WIFI-Based Indoor Positioning System
29. Remote Control of Smart Household Based on DTM
30. Application of CAN Bus in Data Arm Communication System
31. Monitoring system for the integrated acquisition of on-board sensor data in cruising motoryachts
32. Smartphone-Based Vehicle-to-Driver/Environment Interaction System for Motorcycles
33. Bluetooth Data Acquisition System Based on ARM (Bluetooth)
34. USB Sensor Network for Industrial application(Automation)
35. A Smart car Control Model for Brake Comfort based on car Following(CAN)
36. Location-based Services Applied to an Electric Wheelchair Based on the GPS and GSM Networks (2009)
39. Design of PROFIBUS-DP and CAN Bus Communications Unit in Drilling Rig Control System(2009)
40. Extracting Controller Area Network Data for Reliable Car Communications(2009)
41. The System Design of Monitoring abnormal Environment Parameter of Vegetable Greenhouse based on Short Message (GSM -2009)
42. Monitor System of the Intelligent Power Earth lines Based on GSM SMS Protocol(GSM - 2009)
43. Remote Data Monitoring System Design Based on GSM Short Message Service(GSM-2009)
44. Wearable RFID-Enabled Sensor Nodes for biomedical Applications(2009)
46. Direction finding signage system using RFID for healthcare Applications(2009)

EMBEDDED RTOS

1. Implementation of Ad Hoc Network Management System Based on Embedded ARM-Linux Platform
2. Embedded Neural Recording With TinyOS-Based Wireless-Enabled Processor Modules
3. Embedded Virtual Machines for Robust Wireless Control and Actuation
4. Run-Time Task Allocation Considering User Behavior in Embedded Multiprocessor Networks-on-Chip
5. Development of Control system in electromagnetic acquisition station based on ARM and Linux
6. Design and Implementation of Vehicle Wireless Data Transmission Based on MIPS-Linux
7. Design and Implementation of Embedded Indoor Intelligent Temperature Control System
8. Real-time operating system (RTOS) for small (16-bit) microcontroller(2009)

EMBEDDED WEB BASED

1. Remote Access of Peripherals using Web Server on FPGA Platform
2. Wireless Monitoring System Design based on Embedded uclinux System
3. The Electrical Ethernet monitoring system based on embedded Web server
4. Design of Wireless Embedded Thin Web Server Based on Zigbee
5. The Design of Remote Embedded Monitoring System based on Internet
7. An Internet-Based Interactive Embedded Data-Acquisition System for Real-Time Applications (2009)
9. An Internet based Interactive Embedded Data Acquisition system for real time Applications(2009)
10. Plug-n-play Smart Sensor Network with dynamic web service (2009)

EMBEDDED WIRELESS (RF/WIFI/ZIGBEE)

1. An Efficient Design of Security Accelerator for IEEE 802.15.4 Wireless Sensor Networks
2. Design and Implement of the Embedded Elevator Monitor System based on Wireless Communication
3. Camera-in-hand Robotic System for Remote Monitoring of Plant Growth in a Laboratory
4. Design and Implementation of Embedded Indoor Intelligent Temperature Control System
5. Mobile Scheduling for Spatiotemporal Detection in Wireless Sensor Networks
7. Development of a Wireless Miniaturized Smart Sensor Network for Aircraft Corrosion Monitoring
8. Middleware Design for Measurement Data Exchange in a Smart Sensor Network
10. Real-time Urban Bridge Health Monitoring Using a Fixed Wireless Mesh Network
11. Stationary and Mobile Target Detection using Mobile Wireless Sensor Networks
12. The Design of Wetland Water Environmental Monitoring System using Digital Video based on Wireless Sensor Networks
13. The design of indoor scene lighting system
14. Wireless Fingerprint Attendance System Based on ZigBee Technology
15. Network Intrusion Detection System Embedded on a Smart Sensor
16. A Novel Design of Solid-state Lighting Control System
17. Remote Monitoring of Building Structural Integrity by a Smart Wireless Sensor Network
18. Networked Wireless Meter Reading System based on Zigbee Technology
19. Wireless Sensor Networks with Embedded Intelligence for Agricultural Applications
20. WSN Nodes for Traffic Data-acquisition system
22. Wireless Health Monitoring System
23. Wireless Powering of Sensors Embedded in Concrete
25. Application of ZigBee for Pollution Monitoring Caused by Automobile Exhaust Gases (2009)
32. Relative Location Estimation of Vehicles in Parking Management System (WIFI-2009)
33. Synchronous Ultra-Wide Band Wireless Sensors Networks for oil and gas exploration (WIFI -2009)
34. A Body Sensor Networks Development Platform for Pervasive Healthcare(BSN)
35. An Ambient Intelligent Body Sensor Network For e-Health Applications( BSN)
36. MEMS energy harvesting powered wireless biometric sensor(BSN)

PLC/HMI

1. An Access Control Method for Multipoint Cyclic Data Gathering over a PLC Network
2. Design and Emulation of high-speed narrowband PLC system for Smart meter reading
3. Remote Automation Laboratory Using a Cluster of Virtual Machines
4. Design of the Ethernet based process data extraction algorithm and storage technique for industrial HMI systems
5. Structuring information during the design process of a complex Human-Machine Interface
6. The Design of Intelligent Multimedia Automatic Beverage Machine Control System
7. Improvement of a Human-Machine Interface (HMI) for Driver Assistance Using an Event-Driven Prompting Display
8. A PLC-Based Control System in Wheelset Disassembly Machine
9. An access control method for multipoint cyclic data gathering over a PLC network
10. Advanced Key-Management Architecture for Secure SCADA Communications (2009)

**OLD PROJECT LIST (SOFTWARE AND HARDWARE)**

**Electronics Project Titles:**

1. A Map Matching Algorithm for Car Navigation System that predict user destination using GPS
2. Speaking Monuments Design and implementation of an RFID based Blind friendly Environment
3. Group Elevator Scheduling with advanced information for normal and emergency modes
4. Wifi Security for prevention of hacking using Rabbit Processor
5. Plug-n-Play Smart Sensor Network with Dynamic web Service
6. Race control algorithm for the full bridge PRCP converter using cost effective FPGA
7. FPGA-Based Predictive Current Controller for Synchronous Machine Speed Drive
8. A Stochastic-Based FPGA Controller for an Induction Motor Drive with Integrated Neural Network Algorithms
10. Robust RBFN control of linear induction motor using FPGA
12. CAN based based Distribution fuel System with Smart components (CAN)
14. CAN Bus Embedded System for Lighting Network Applications(CAN)
15. Development of a MEMS based wearable motion capture system
16. Genetic Algorithm For Shortest Driving Time In Intelligent Transportation System
17. Student Information System Retrieval Using GSM
18. USB Sensor Network for Industrial application
19. CAN based Distribution fuel System with Smart components
20. Automobile Anti-theft System Design based on GSM
21. Wireless Sensor Technology for Monitoring Civil Structures
22. A Map Matching Algorithm for Car Navigation System that predict user destination using GPS
23. Online Real Time Vehicle Tracking using RFID
24. Microcontroller based standalone pv system for wireless sensor node
25. Implementation of Obstacle avoidance and Zigbee Control function for Omni directional robot
26. Design of Walking and speaking robot
27. Spatial Auditory Interface For an Embedded Communication Device In a Car
28. Voice Controlled wheel chair (Audio)
29. A Smart universal remote control based on audio visual device visualization (Audio)
30. Earth quake alarm system using GPS in moving vehicle.
31. Embedded infantry gadget.
32. Anti collision and mileage indication system using CAN.
33. Step climbing robot
34. Finger print authentication for vehicle access system
35. GSM based secured ATM cash Transactions with Dynamic Pin
36. A New Electronic Tonometer for Ocular Epipalpebral Measurements.
37. A Cellular Phone based Home Alarm System
38. An Implementation of Remote Lighting control system based on zigbee /RF.
39. Anti-Theft System using I2c & Mems Sensor /RF
40. An Emergency Earth Quake Warning System for Land Mobile Vehicle
41. Automobile Anti Theft System using GSM
42. Improving Security in Bank Locker using GSM Communications
43. Cell Phone operated Robot
44. Centralized Secured Voting System using Fingerprint Sensor
45. Coin Operated Mineral Water Distribution System
46. Embedded based staff in & out time Maintenance System using PIC Microcontroller
47. FSK based Wireless Encryption/Decryption System
48. Fuzzy logic based Temperature Measurement
49. Accident Avoidance System in Hair pin bends
50. GSM based Toll Gate Security System in the border areas
51. Microcontroller based Information Retrieval System using GSM
52. Intelligent Fire Fighter Robot
53. Microcontroller based Bank Locker Security System with Voice Reporting
54. Genetic Algorithm for shortest Driving Time in Intelligent Transportation System
55. Microcontroller based LPG Gas Leakage Protester System
56. Voice Controlled Pick & Place Robot
57. Unmanned Railway Tracking and Anti collision System using GPS
58. Remote Guidance for the Blind
59. Remote Sensing & Control of Irrigation System
60. RFID based Attendance System
61. RFID based Automatic Petrol Filling System
62. Wireless Sensor N/W in Structural Health Monitoring based on RF/Zigbee Tech
63. Robot for Power line Inspection
64. Vehicle Parameter Monitoring System
65. Voice based Switching Control of House hold Electrical Appliance using VI
67. Voice Controlled Automation of Fan & Lights
68. Wall Claiming Robot
69. Landmine Detector
70. Intelligent Oil Well Controller System
71. Application of Fuzzy Logic Controller for Spacecraft Attitude Control
72. Smart Car Control Model for Brake Comfort based on Car Following
73. Embedded Control System for DOF Manipulator by means of SPI Bus
74. Future Traffic Information Tracking using GSM
75. Group Elevator Scheduling With Advance Information For Normal And Emergency Modes
76. Power theft Identification System
77. Vehicle Supervision System based on MEMS Geo Sensor
78. A System for Monitoring Worker’s Safety in an Unhealthy Environment by Means of Wireless Sensor
79. Voice Controller Wheel Chair
80. I2C based RTC for Automatic College bell System
81. Automatic Voice Mail Recording
82. ECG Monitoring for Patient Cardiac Signal Analysis (ECG, Heart rate)
83. Automatic Accident Identification Alert System Using Vibration Sensor and RF Technology
84. Energy Meter for Traffic Light Controller
85. Temperature Monitoring & Humidity Control using Labview
86. Finger Print based Secure System for Automobile
87. Air Flow Control Using Fuzzy Logic
88. Centralized Wireless Monitoring Textile Industries
89. Energy Prepaid Card Using Microcontroller
90. Power line Following Robot
91. Wireless based control of stepper Motor using RF Technology
92. DTMF Controlled Railway Reservation System
93. A Scalable and Efficient approach for obtaining measurement in CAN based control system
94. Voice Enabled Passenger alerting system
95. AC Plant Control Through Rs 485 Communication
96. Automatic Over Speed Detector
97. Microcontroller based Security System using Sonar
98. Microcontroller based Barcode Decoder
99. Microcontroller based Dissolving Process Controller
100. Keyword Interfaced Moving Message Display
101. Motor speed control system with system interface
102. Multi-channel electrical appliance switching and control system
103. Lawn Sprinkler System
104. Smart Switch for Car Windscreen Wiper control
105. Remote automobile security locking system (IR, FM)
106. Microprocessor based bank token display with Voice
107. Design of irrigation controller for Garden
108. Automatic telephone answering system
109. EB wireless monitoring system through PC
110. Smartcard operated lock and anti theft system
111. Microcontroller Based Cellular Voting Machine
112. Microcontroller Based Barcode Decoder
113. Pick and Place Robot through wireless communication
114. Microcontroller based Walking Robot
115. Spy Robot for welding  
116. Wireless Rain Disaster System  
117. Voice operated TV control system.  
118. DC motor Speed control using VI.  
119. Tooth click using hand free computer  
120. Vehicles parameter status control and monitoring such as temp speed audio wide fuel empty battery engine  
121. Microcontroller based AC planet control through RS485 communication  
122. PLC Based Automatic Car Washing System  
123. PLC Based Automatic Bottle Filling System  
124. PLC Based Pick and Place Robot  
125. PLC Based Material Trolley Controller  
126. PLC Based Traffic Density Control Using Sensor  
127. PLC Based Pressure Controller  
128. PLC Based Automatic Industrial Drainage Timer  
129. PLC Based Elevator Controller  
130. Automatic Star Delta Starter  
131. PLC Based Filter Reactor In Sugar Factory  
132. PLC Based Fire Monitor  
133. A Web-Based Remote Access Laboratory Using SCADA  
134. Urban Water Supply Distributed Control System  
135. Automation and Information Management for a Large Urban Power Distribution Network  
136. Development of Customized Distribution Automation System (DAS) for Secure Fault Isolation in Low Voltage Distribution System  
137. Monitoring, Control, and Automation of Large Wind Plants  
138. Deployment of a SCADA Integrated Wide Area Monitoring System  
139. Vulnerability Assessment of Cyber security for SCADA Systems.  
140. Image-Based Human Age Estimation by Manifold Learning and Locally Adjusted Robust Regression  
141. Blind Separation of Superimposed Shifted Images Using Parameterized Joint Diagonalization

**ELECTRICAL TOPICS**

1. Design & Implementation Of Model Predictive Control For Electrical Motor Drives  
2. Efficiency Optimization Control Of Single-Phase Induction Motor Drives  
3. GA Optimized PID Controller For Automatic Generation Control Of Two Area Reheat Thermal System  
4. Intelligent Digital PWM Generation For Power Control Applications  
5. Microcontroller Based Voltage Current Monitor  
6. Modified Elman Neural N/W Controller With Improved PSO For Linear Synchronous Motor Drive  
7. Non Linear Fuzzy PID Control Design For Improving Stability Of Micro-Turbine System  
8. Power Management Of A Standalone Wind Photovoltaic Energy System  
10. Wireless Control Of Stepper Motor Using RF Communication
12. Solar Tracking & Data Logger
13. Power Efficient Induction Motor For Energy Saving
14. Power Saving With Dynamic Voltage And Frequency Scaling
15. DC To AC Power Converter For Electric Boat Inboard Propulsion System
16. Speed Control Of A Switched Reluctance Motor Using A Dspic
17. Improvement Of An Automated Car Park Monitor
18. Electronic Chopper Control
19. A Fuzzy Auto-Tuning PID Temperature Controller
20. AC Motor Speed Control Using PWM Technique
21. Design Of Hybrid Vehicle
22. Power Line Communication
23. Fuzzy-Logic-Based Switching State Selection For Direct Power Control Of Three-Phase PWM Rectifier
24. Fuzzy Logic Control Of Servo Systems
25. A Smart Dimmable Electronic Ballast
26. Traffic Light Controller Multiway
27. A Advanced Pre Paid Electricity System
28. Design Of A Hybrid Model For Midterm Load Forecasting In Power Utilities
29. Development of an Intelligent System for Detection of Abnormalities and Electricity Theft for Remote Meters In The TNB.
30. Development of An Intelligent Pedestrian Crossing Traffic Light
31. Power Factor Correction For Switched Mode Power Supplies
32. Fuzzy Logic Based Control Of Variable Speed Induction Machine Wind Generation System
33. Z-Source Inverter For Power Conditioning And Utility Interface Of Renewable Energy Sources
34. AI Based Design Of A Fuzzy Logic Scheme For Speed Control Of Induction Motors Using SVPWM Technique
35. Real-Time DC Motor Position Control By Fuzzy Logic And PID Controllers Using Labview
36. Remote Control Of An Ultrasonic Motor By Using A GSM Mobile Phone
37. Speed Control Of 3 phase Induction Motor and Control.
38. Control Of A Simple DC Motor Robot Equipped With Ultrasonic Sensors Via A Field Programmable Gate Array
39. Remote Monitoring System For Transformer Substations
40. Robust Control Of A Speed Sensor less Permanent Magnet Synchronous Motor Drive
41. A Three-Level Single-Phase Single-Stage Soft-Switched AC-DC Converter
42. Automated Vehicles For Physically And Visually Challenged
43. Power Effective Induction Motor For Energy Saving Using Chopper Cyclo converter
44. Speed Control Of Induction Motor Using PLC
45. VI Measurement Of The DC Motor
46. PF Calculation For 3 phase Induction Motor
47. Power Theft Identification In E.B
48. Echo Friendly Electrical Power Generation Using Foot Step
49. Output Power Maximizing Of A Wind Mill By Adjusting Rotor Speed
50. Controller For 1kw-5kw Wind-Solar Hybrid Generation Systems
51. Fuzzy Logic Based Switch State Selection For Direct Power Control Of 3 Phase PWM Rectifier
52. Techno-Economic Optimum Sizing Of A Stand-Alone Solar Photovoltaic System
53. Dual Z-Source Inverter With Three-Level Reduced Common-Mode Switching
54. Nonlinear Digital PId Controller For Dc-Dc Converters
55. Solid state voltage and frequency controller for a standalone wind power generating system
56. Converter for 1kw-5 kW turbine of solar hybrid generation system
58. Unity Power Factor Isolated Three-Phase Rectifier with Split DC-Bus Based on the Scott Transformer
59. Modified Elman neural network controller using improved particle swarm optimization for linear synchronous motor drive
60. Intelligent Digital PWM Generation for power control applications
61. Windmill control system
62. Voltage, Current, Speed monitor through power line
63. Motor Speed Control through Power line
64. Closed loop motor Speed Controller using Cellular phone
65. UPS Monitoring System
66. Wireless Monitoring of Electrical Parameters with PC

**MECHATRONICS / AUTOMATION PROJECTS**

1. A Gait Monitoring System Based on Air Pressure Sensors Embedded in a Shoe (2009)
2. Motion and Internal Force Control for Omnidirectional Wheeled Mobile Robots (2009)
3. Automatic coffee vendor
4. Coin based water vending m/c
5. Computer controlled pneumatic system
6. Pneumatic wood cutting m/c
7. Mini water service station
8. Automatic pressure monitor and cutoff system
9. Design & Fabrication id based purchase trolley
10. RF id based auto door open close and attendance
11. RF id based library conveyer system
12. Triangular advertisement display
13. Moving wheel chair with bio monitor and sms sender
15. Design & Fabrication of Conveyor Automation
16. Automatic Car Parking System for apartment Building
17. Sensor Based Automatic paint marking machine for sprocket Industries
18. Automatic Packing control Machine for Industrial Application
19. Automatic Scrap Collecting Vehicle
20. Automatic railway track crack detecting Vehicle
22. Automatic Pneumatic Reciprocating Water Pumping System
23. Automatic Visitor Guided with Material Handling Vehicle
24. Automatic Vegetable (or) Lemon Cutting machine
25. Timing operated solar pump
26. Wireless curtain opening system for vip function
27. Automatic esclator control system
28. Automatic Water level controller for Over head tank
29. Blood/Glucose flow rate controller (Motorized)
30. Automatic pneumatic road marking m/c
31. Railways Accident Avoiding System
32. Fabrication of Simple indexing by stepper motor in Shaping Machine
33. Fabrication of Auto Indexing Drilling Machine
34. Highways high speed (vehicle) sensing and automatic speed braking system
35. Fabrication of pneumatic auto feed punching and riveting Machine
36. Fabrication of pneumatic Auto feed Punching Machine
37. Fabrication of Automatic Sensor Based Reverse Braking System
38. Fabrication of Fully Automated Drilling Machine
39. Fabrication of Emergency Braking System (EBS)
40. Fabrication of Automatic Electro hydraulic Jack
41. Fabrication of PC based auto feed pneumatic vice
42. Automatic rain operated wiper
43. Fabrication of Automatic Plate Washing Machine
44. Automatic Wheel Chair for physically disabled person
45. Fully Automated Intelligent Vehicle (Car Model)
46. Fabrication of Pneumatic Machining Time Reduction in Shaper
47. Automatic Scrap collecting Vehicle
48. Fabrication of Automatic Railway Gate Controller
49. Automatic Rain operated wiper and Head light Dim / Bright Controller
50. Fabrication of Sensor Operated Automated Guided Vehicle
51. Sensor Based Automatic Water level Sensing Crane
52. Automatic Solar Traffic and Street Light Controller
53. Fabrication of Automatic Pneumatic Hammer
54. Pick and place crane
55. Fabrication of Automatic Vehicle Over speed controlling system for School Zone

MECHANICAL

1. Fabrication of Automatic Vegetable Slicing Machine
2. Automatic Car Wiper
3. Fabrication of Wax Heating Machine
4. Fabrication of SPY Robot
5. Fabrication of HTP Machine Cutter
6. Fabrication Grass Cutting Machine
7. Fabrication of Pneumatic Multinut Tighter
8. Fabrication of Pneumatic Braking System
9. Electric Power Steering
10. Fabrication of Air Compressor
11. Design of Walking Robot
12. Voice Enabled Pick & Place Robot
13. Design of RF based Pick and Place Robot
14. Sensor based Automatic Reverse Braking System
15. Voice Controlled Wheel Chair
16. Automatic Welding Robot
17. Design & Fabrication of Hydraulic Pipe Bending Machine
18. Fabrication of Tapping Machine
19. Spray Painting Robot
20. High Speed Solenoid Valve in Pneumatic Servo Application
21. Mechanical Design of Solar Vehicle
22. Design & Fabrication of Micro Turbine System
23. Fabrication of Plate Bending Machine
24. Hydraulic Bench vise
25. Multi-Storey car Parking
26. Gesture Based Control of Tank Robot
27. Intelligent Fire Fighter Robot
28. Design and Fabrication of Irrigation System
29. Design of Step Climbing Robot
30. Design of Wall Climbing Robot
31. Design and Fabrication of Tapping Machine
32. Design and Fabrication of Cradle
33. Robotic Trolley For Material Handling
34. Design and control of Group Elevator
35. Automatic Drilling And Tapping Machine
36. Automatic gear changer/display
37. Automatic Sealing Machine
38. Circular Cutting Machine
39. CNC Bar Feeding Machine
40. Pneumatic hag saw cutter
41. Automatic Pneumatic Door Opener
42. intelligent home security robot
43. Fabrication of Automatic Electro-Hydraulic Jack for Four Wheeler
44. Electronic assisted hydraulic braking system
45. Fabrication of hydraulic screw jack
46. Automatic Electro-magnetic Clutch
47. Fabrication of Solar Hybrid Car
48. Fabrication of Fully Automated Intelligent Vehicle (Car Model)
49. Fabrication of Hybrid Vehicle
50. Fabrication of Wind Energy Vehicle
51. Fabrication of Intelligent Motorized Hydraulic Jack
52. Fabrication of Electro-Hydraulic Braking system for Four Wheeler
53. Fabrication of Path Finding Robot
54. Fabrication of Automatic Railway Gate Controller
55. Fabrication of oil pump and water pump for jeep and tractor  
56. Quick lifting jack with Gear Arrangement  
57. Automatic Water Tape Controlling System  
58. Fabrication of Coconut Harvester  
59. Fabrication of Electric Two Wheeler  
60. Fabrication Hydraulic Pipe bending Machine  
61. Fabrication Hydraulic fork lift  
62. Fabrication of pedaling compressor  
63. Fabrication of Gear Level Indicator for Automobile  
64. Fabrication of Motorized Jack  
65. Fabrication of Pneumatic / Hydraulic sheet cutting Machine  
66. Automatic Speed Brake Control  
67. Design and Fabrication for 2 Dimensional Conveyance System  
68. Flexible Force control for Accurate Low cost Robot Drill  
69. Automatic Pneumatic Ramming Machine  

**SOFTWARE TITLES**  
1. A Divide-and-Conquer Approach for Minimum Spanning Tree-Based Clustering (Java)  
2. A Simple and Efficient Hidden Markov Model Scheme for Host-Based Anomaly Intrusion Detection (Java)  
3. Ordered Round-Robin in efficient sequence preserving packet scheduler (Java)  
4. Internet traffic Behavior profiling for network security monitoring (.net)  
5. Towards identifying usability and security features of graphical password in Knowledge based authentication technique.(Java)  
6. Parallel Pipeline processing for Grid Computing.(Java)  
7. Neural network techniques for Proactive password checking (.Net)  
8. LSB based Audio Stegnography method based on lifting Wavelet Transform (Java)  
10. RMI-JDBC based remote printing.(Java)  
11. Distributed delay routing algorithm for shortest path.(Java)  
12. Automatic Image-to-Text-to-Voice Conversion for Interactively Locating Objects in Home Environments(.Net)  
13. A Novel Vision Based Finger-Writing Character Recognition System (Java)  
14. Effective and Efficient Query Processing for Video Subsequence Identification(.net)  
15. Spherical Coding algorithm for Wavelet Image Compression (.Net)  
16. Robust Text-Line and word Segmentation for Handwritten Document Images (.Net)  
17. Address Book using Java (Java)  
18. A Fingertip Detection and Tracking System as a Virtual Mouse, a Signature Input Device and an Application Selector (.Net)  
19. Joint Optimization of Data Hiding and Video Compression (.Net)  
20. RFID based secured attendance system (.Net)  
21. Pharmaceutical Management Information Systems (Java)  
22. Fuzzy logic based pick and place Robot using VB.Net  
23. File Migration using XML (Java)  
24. Disease Detection and Identification using Medical Image Processing Technique (Java)
25. INCS Chat Server (Java)
26. RMI JDBC based 3 tier Remote Printing (Java)
27. JMF based Video Conferencing (Java)
29. Controlling Data Dictionary Attacks using Graphical password and Data Hiding in Video steganography (Java)
30. Exploiting Motion Correlations in 3-D Articulated Human Motion Tracking (.Net)
31. Decision Support System for IT and Non IT Prediction (.Net)
32. Improving Mobile Banking Security Using Stenography (Java)
33. Information driven association Rule Hiding Algorithms (Java)
34. Design of Mobile Electronic commerce system based on J2ME (Java)
35. Multicast Live Video Broadcasting Using Real Time Transmission Protocol (Java)
36. Artificial Intelligence Browser Using Java Speech Api (Java)
37. Retrieving Files Using Content Based Search (Java)
38. Effective Packet Analyzing And Filtering System For Atm Network (Java)
39. Virtual Travel Agency Based On web Services (.Net)
40. Controlling IP Spoofing through Interdomain Packet Filters (NS2)
41. Multicasting with Localized Control In Wireless Ad-Hoc Networks(NS2)
42. Monitoring the Application-Layer DDOS Attacks for Popular Websites(NS2)
43. AICN: An Efficient Algorithm to Identify Compromised Nodes in Wireless Sensor Network (NS2)
44. A Mobile-Directory Approach to Service Discovery in Wireless Ad Hoc Network(NS2)
45. A Mobility-Prediction-Based Relay Deployment Framework for Conserving Power in MANETs (NS2)
46. Distributed Algorithm for En Route Aggregation Decision in Wireless Sensor Networks(NS2)
47. A Neural Network Model to Minimize the Connected Dominating Set for Self-Configuration of Wireless Sensor Networks (NS2)
48. Performance Evaluation of ERP Systems (NS2)
49. Reengineering of ERP System Based on Data Mining (Java)
50. Clustering and Sequential Pattern Mining of Online Collaborative Learning Data(Java)
51. Cluster based Evaluation for fuzzy Data Mining(Java)
52. Sales Forecasting through Fuzzy Neural Networks(Java)
53. Batch Mode active learning with applications for text categorization and image retrieval(Java)
54. Biometrics authentication for border control application(.Net)
55. Intelligent Quality Performance Assessment for E-Banking Security using Fuzzy Logic(Java)
56. Enhancing Learning Objects with Ontology based Memory. (Java)
57. Classification of Threaten Emails(.Net)
58. Web user Session inference by means of Clustering techniques(Java)
59. Relation based Page Rank Algorithm for Semantic Web search engine Service Mining on the Web(.Net)
60. User Friendly Internet Identity Management System(.Net)
61. ISO Standardization(.Net)
62. Pharmaceutical Management Information Systems(Java)
63. College alumni Management System (.Net)
64. K-Source (.Net)
65. Customer Care Management System (.Net)
66. Mobile Banking (Java)
67. Fleet Maintenance and Management System (.Net)
68. Design And Implementation Of Work Planner For Staff Scheduling
69. Overseas Shelters (.Net)
70. Custom Shopping Cart (Java)
71. Online voice chat Server for advocates (Java)
72. J2ME Mail Client (Java)
73. Voting system using Mobile (Java)
74. RFID based secured attendance system (.Net)
75. Web based application for Blind People (.Net)
76. XML based Web Enabled Database (Java)
77. Web Portal for Advocate Automation System (Java)
78. BlogHarvest: Blog Mining and Search Framework (.Net)
80. Online Index Recommendations for High-Dimensional Databases Using Query Workloads (.Net)
81. Library Management System using Secure Fingerprint Authentication (.Net)
82. Credit Credit Card Management System (.Net)
83. Analytical Information system for Decision Support and Forecasting (Java)
84. Domain Ontology based Automatic Question answering Technique (Java)
85. Web Usage Mining Framework for evolving user profile in dynamic webs site (Java)
86. E-Commerce Application for B2C Consumers (Java)