EXPERT SYSTEMS AND SOLUTIONS

IEEE based Projects

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IEEE based Projects For
Final year students of B.E in
EEE, ECE, EIE,CSE
M.E (Power Systems)
M.E (Applied Electronics)
M.E (Power Electronics)
Ph.D Electrical and Electronics.

Training

Students can assemble their hardware in our Research labs. Experts will be guiding the projects.

Machines

1. Design of Polyphase squirrel cage induction motor
2. Design of 3phase distribution transformer
3. Performance of induction motor – Computer aided study
4. Computer Aided Design of induction motor
5. Design of transformer using Genetic Algorithm
6. Design of D.C machine using FEA.

Power system

1. Short circuit analysis in C++
2. Micro controller based automatic Tap changer
3. Generation optimization using genetic algorithm
4. Transformer design in MATLAB
5. Power system software – design & computations
6. Microprocessor based automatic power factor monitor cum controller
7. Solution of Power system Analysis using neural networks
8. Unit Commitment in interconnected power system
9. DSP based Study of Power System Transients

Power Electronics

1. Thyristor controlled reactor compensator for fast changing loads
2. Thyristor Automatic Voltage - Fuzzy Logic
3. MOSFET based UPS design
4. Design of IGBT based inverter
5. Thyristrorised power controller
6. Optimal voltage and frequency Selection for A.C drives in C
7. Micro controller based online UPS
8. Wind energy generator
9. Microprocessor based DC motor control using SCR
10. Computer based speed control of DC motor
11. Microprocessor based automatic synchronization
12. Fuzzy logic based speed control, digital time switch
13. Uninterrupted power supply using power transistors
14. Microprocessor based maximum demand controller

Embedded Systems

1. Micro controller based speed control of AC machine
2. Firing angle control for Thyristors
3. Microcontroller based thermo meter
4. Micro controller based Annunicator System
5. PWM using micro-controllers
6. V/F controller using Micro controllers
7. Power plant monitoring using embedded controllers
8. Fuzzy implementation using PIC Microcontrollers
9. PIC based Speed and torque control in machines
10. Design of embedded inverters
11. Micro Controller based C.R.O using P.C
12. LIN coding for PIC

Electronics

1. PC based security system
2. Expert system for electronic circuit trouble shooting
3. Automation of plant using process computer
4. Heart beat monitor
5. PLC based automatic station announcer
6. Industrial automation Via PC-PC communication
7. PC based phase controller using graphic user interface
8. Micro-controller based I.M Protection System
9. Embedded micro controller based Heart lung machine using robotics
10. Remote SCADA
11. Expert system for electronic circuit trouble shooting
12. Expert system for electronic circuit trouble shooting
13. PLC for Factory automation
14. Ozone generation from Corona

Microprocessor and PC

1. Microprocessor based temperature control
2. Processor based automatic temperature control
3. Microprocessor based automatic power factor monitor cum controller
4. Micro controller based AC volt stabilizer and furnace safeguard supervisory system
5. PC based data acquisition card register
6. Microprocessor based accurate automatic conveyor controller

PC based steam controller with

1. Digital filter design using DSP – HARDWARE
2. DSP application in speech processing
3. Cryptography – in network security and image processing
4. Hearing aid with selective frequency amplification
5. PWM using TMS320C50 processors
6. Speed control of induction motor using constant V/HZ
7. TMS320C240 and micro controller based linear position measuring system
8. Data compression for telecommunication application

Artificial Neural Network

1. Image compression based on lifting scheme
2. Load forecasting in power systems using ANN
3. EHV fault location using ANN
4. Transformer fault identification using ANN
5. Pattern identification using ANN