

## **Research & Development Details:**

### **Dr. S. K. Singhai**

1. Modified Framing strategy for Congestion control in broadband Networks.
2. Transient Control Techniques in synchronous Wind turbine Generators.
3. Soil Moisture Modeling by the use of the Multi-angle synthetic aperture Radar data.
4. Building block approach for Finite element Model updating of Structures.
5. Classification Model as Intrusion detection system (IDS) using Data Mining Technique.
6. A Comparative based study of different video-shot boundary Detection Algorithm.
7. Video-Shot Boundary Detection using Dual-tree complex wavelet.
8. Fuzzified Multi Objective PSO Approach for Amalgamate Environmental/ Economic dispatch with Potential Stability Curatailment.
9. Expert Portfolio System using Integrated MCDM-GP approach.
10. Selection of Foreign Players in T20 cricket League using Multiple Criteria Decision Making (MCDM) Technique.
11. Stock Index ranking and Performance Evaluation of shanghai stock Exchange (SSE) using AHP and TOPSIS Method.
12. Delineation of Power Grading system by Utilizing Microcontroller for Dual Energy sources.
13. PSO Approach for Reactive Optimization.
14. Scrutiny of Phenomena of Voltage Black out Criteria on Power System Transmission Line.
15. A Dynamic SUGPDS Model for Fault detection and Isolation of Underground Power Cable based in Detection and Isolation Algorithm and smart sensors.
16. Efficient Detection and Analysis of Shunt Fault in electric power distribution system (EPDS) using DCFC and EFDC algorithm: a modeling and simulation approach.
17. A Novel approach for detecting and analyzing the shunt fault in Electrical Power distribution system (EPDS).
18. Simulation and Analysis for solar Powered electric Vehicle Charging station based on MPPT.
19. Enhancement of Images of Varying Illumination using Logarithmic Model.
20. An Ensemble Classification Model for Intrusion Detection System with Feature Selection.
21. Application of Fuzzy Analytic Hierarchy Method in Software Engineering Scenario.
22. A Review on Different Methods of Video Shot Boundry Detection.
23. Fuzzy AHP and Fuzzy Topsis Methods Applied for Evaluation of Software Programmer Based On COCOMO's Effort Multipliers.
24. Data Mining Techniques and its Ensemble Model Applied for Classification of E-Mail Data.
25. Artificial Neural Network, Decision Tree and Statistical Techniques Applied for Designing and Developing E-mail Classifier.
26. Tuned Artificial Neural Network Model for E-mail Data Classification with Feature Selection.
27. An Efficient Decision Tree Model for Classification of Attacks with Feature Selection.
28. Comparison between Gesture Interpretation and Dual-Tree Complex Wavelet Transform method of Video shot boundary detection.

29. Developing an Efficient Algorithm for Video Shot Boundary Detection Using Dual Tree Complex Wavelet Transform.
30. Predicting Software Development Effort Using Tuned Artificial Neural Network.
31. Application of Genetic Algorithm to the Problem of Control System.
32. A Status Review of Different Industrial Drives.
33. Application of Topsis Method for Stock Index Ranking.
34. Software Effort Prediction Using Integrated Approach of Wavelet Transformation and Neural Network.
35. Modeling & Design of DTMF Technique Based Automatic Mobile Switching & Control of any Machinery.
36. An Integrated Three Tier Architecture of AHP-GP for Stock Portfolio Management.
37. Method Applied for Portfolio Ranking of Various Indices and Its Year Wise Comparison.
38. Transient Stability Analysis for Betterment of Power System Stability Adopting HVDC Controls.

**Dr. K. K. Saxena**

1. Wavelet Based Random Noise Removal from Color Images using Python.
2. Oscillatory stability limit enhancement by adaptive control rescheduling.
3. Application of Bifurcation theory in Power System stability Analysis.
4. Actual reactive Capability assessment of large alternator.

**Prof. Sanjay Kumar Dewangan**

1. Grid connected transformer-less Inverters for Photovoltaic systems: Analysis and Control.
2. Bi-Keeper Arrangement with Isolated Contention stage technique for Domino Logic Based low Power High Fan-in OR Gates.
3. Charge sharing Tolerant domino with contention current Partitioning for wide Fan-in OR Logic Gates.
4. Modeling and simulation of MPPT controller for Photovoltaic Dc/Dc Converter Applications.