Prayag - Centre for Knowledge Informatics for Sustainable Development

According to World Commission on Environment and Development (1987), Sustainable development means - *development which meets the needs of the present without compromising the ability of future generations to meet their own needs*. It is concerned about environmental, economic, social, and cultural aspects. Sustainability has following dimensions:

i. Conservation and enrichment of physical environment and cultural heritage
ii. Enhancement of the accessibility and quality of basic facilities
   - Nutrition, water supply, housing, sanitation, health care, energy, transport, and safety
iii. Advancement of the support system for enhancing human's happiness by focusing on intrinsic psychological needs – social, cognitive, aesthetics, and self actualization.
   - Competence - quality of education
   - Equity, Empowerment and Autonomy
   - Relatedness, cooperation, and collaboration
   - Creativity
iv. Risk analysis and management

In the last twenty years, almost all academic disciplines have shown an increasing sensitivity towards the challenges of sustainability. Many researchers in diverse disciplines are now actively contributing discipline specific research on some topics wrt this important and pervasive theme. Following trends in IT are associated with sustainability:
- Green IT approaches, e.g., low power technology, cloud, reusability etc.
- Cloud computing
- Cyber security
- Accessible computing
- IT applications for healthcare, education, safety, energy management, water management, transport and traffic management, relatedness and collaboration, creativity support, entertainment, etc.

However, because of disciplinary boundaries, often the researchers in one discipline are not even aware of the work being done by their counterparts in other disciplines, even within the same university. Prayag aims to fill up this gap by creating a community of such multidisciplinary researchers at JIIT who are driven by the concerns of sustainable development. It has been envisaged as a forum to contribute towards deepening and broadening the understanding about the multifaceted challenges and solutions associated with sustainable development. It seeks to do so through facilitating and promoting discipline specific as well as IT inclusive cross-disciplinary approach.

In the last few years, a rich body of discipline specific research work has been generated by JIIT faculty and students. 71 faculty members and their scholars at departments of CSE&IT, ECE, HSS, Biotech, and Maths and also at Business school in JIIT have

collectively produced 209 publications as papers and book chapters about their investigations and proposed solutions on many of the above listed issues of sustainability. However, often the sustainability problems are complex and are beyond the realm of any single discipline. Sometimes they are also beyond the realm of documented knowledge and even awareness. Creations of sustainable systems require holistic thinking, cross-disciplinary approach, multi-perspective integration, and innovation. *Prayag, as an active community of researchers at JIIT, is making humble contributions for creating opportunities of multidisciplinary collaborations in this interdisciplinary task.*

Fulbright Fellowship
Dr. Nripendra Singh
Date: August 2012-December 2012
Amount: $12000
Category: Fulbright-Nehru Environmental Leadership Program (FNELP) 2012-13.
University: Pennsylvania State University, University Park, PA, USA.
Title: Waste Management in Hospitality Sector for Profitability and Sustainability.

Prayag - Centre for Knowledge Informatics for Sustainable Development
Book:

1. Sharma, A., Garg, R. and Mohapatra, S. (ed.), Education and Women Empowerment, Pam leaf Publication, New Delhi, 2011. ISBN 10:8190991493.

2. Bhattacharjee, S. "Rural women and their quality of life", published by Pointer Publishing House, Jaipur, 2007.

Book Chapters:

1. Goel Sanjay (2013), Peer Mentoring in a Technical Institution: Undergraduate Mentoring in Software Engineering, in Smith, T. (Ed.), Undergraduate Curricular Peer Mentoring Programs: Perspectives on Innovation by Faculty, Staff, and Students. Lanham, MD: Lexington Books, UK., pp 107-120.

2. Goel Sanjay (2011), Nurturing Creative, Thinking Engineers , in Viney Kirpal (Ed.), Engineering Education: Challenges, Changes, Champion Teachers, WIPRO, India.

3. Goel Sanjay (2011), Cross-Level Peer Mentoring , in Viney Kirpal (Ed.), Engineering Education: Challenges, Changes, Champion Teachers, WIPRO, India.

4. Agarwal, Amba, " Disaster Management : A Study of Financing of Disasters Mitigation Programmes in India", published in New Dimensions of Disasters Management in India, edited by Dr Anjuli Mishra and Dr A K Singh, published by Serials Publications, Daryaganj Delhi. 2012. ISBN 9788183875646.

5. Agarwal, Amba, "Women Entrepreneurship: Emerging Issues, Challenges & Strategies", published in 'Women Entrepreneurship in India' edited by K. Sugna, A.K. Singh and R.V.M.Reddy, published by Serial Publications, Daryaganj, N.Delhi. 2012.

Faculty:
CSE
1. Dr. Yaj Medury(Chancellor JIIT & COO JES)
2. Dr. Alka Sharma (Dean & HOD HSS)
3. Prof. Sanjay Goel (HOD)
4. Prof.. Sanjeev Kumar Sharma
5. Prof. R.C Jain
6. Prof. G.K. Agarwal
7. Prof. Alka Choubey(Tripathi)
8. Prof.. Naseem Abidi
9. Dr. Satish Chandra
10. Dr. Shelly Sachdeva
11. Dr. Kamal Rawal
12. Dr. Chakresh Jain
13. Dr. Indira Sarethy
14. Dr. Sanjay Gupta
15. Dr. Krishna Sundari
16. Dr. Neeraj Wadhawa
17. Dr. Reema Gabrani
18. Dr. Sudha Srivastava
19. Dr. Sujata Mohanty
20. Dr. Vibha Gupta
21. Dr. Vibha Rani
22. Dr.Krishna Asawa
23. Dr. Vikas Saxena
24. Dr. Sandeep K. Singh

25. Dr. Divakar Yadav
26. Dr. Chetna Dabas
27. Dr. Chetna Gupta
28. Dr. Charu
29. Dr. Shikha Mehta
30. Dr. Devpriya Soni
31. Dr. Anuja Arora
32. Dr. Buddha Singh
33. Dr. Hima Gupta
34. Dr. Rajnish Kumar Misra
35. Dr. Asit Bandyopadhayay
36. Dr. Nripendra Singh
37. Dr. Moonis Shakeel
38. Dr. Rachana
39. Dr. Amba Agarwal
40. Dr. Nidhi Sinha
41. Dr. Sharmistha Bhattacharjee
42. Dr. Badri Bajaj
43. Dr. Santoshi Sengupta
44. Dr. Santosh Dev
45. Dr. Swati Sharma
46. Prakash Kumar
47. K. Rajlaxmi
48. Manish Kumar Thakur
49. Kavita Pandey
50. Sangeeta Mittal
51. Adarsh Kumar
52. Suma Dawn
53. Parmeet Kaur
54. Gagandeep Kaur
55. Indu Chawla
56. Niyati Aggrawal
57. Raju Pal
58. Santosh K. Verma
59. Tribhuwan Kumar Tewari
60. Archana Purwar
61. Adwitiya Sinha
62. Manas Ranjan Behera
63. Kanupriya Misra Bakhru
64. Namita Singhal
65. Debdeep De
66. Smriti Bhatnagar
67. Vineet Khandelwal
68. Juhi Gupta
69. Atul K. Srivastava
70. Gaurav. Verma
71. Shipra Kapoor

Publications in International Journals

1. Jitendra Kumar Seth, Satish Chandra, "A Novel Design to Increase Trust in Cloud", International Journal of Computer Science Issues, Vol. 10, Issue 4, No 1, July 2013, ISSN (Print): 1694-0814;ISSN (Online): 1694-0784. [DBLP etc.]

2. Amanpreet Kaur, Neetu Sardana, " A Novel Image Steganography(NIS) Technique", International Journal of Engineering and Computer Science, Volume 2, Issue 8, pp 2533-2535, August,2013.

3. Tewari, T. K., Saxena, V., Gupta, J. P.," A Novel Approach to Generate Watermarks Using Auditory Features for Audio Watermarking", Journal of Theoretical and Applied Information Technology. ISSN 1817-3195 (Online), ISSN: 1992-8645(print), Volume 35, Number 2, Pages 155- 162, January 2012.

4. Hema Nagaraja, Reema Aswani, Monisha Malik, "Plant Watering Autonomous Mobile Robot", IAES International Journal of Robotics and Automation, Vol 1, No 3: , ISSN: 2089-4856, September 2012.

5. Sandeep Jain, Ankush Mittal and Sujoy Roy, "Model-based image compression framework for CT and MRI images", International Journal of Medical Engineering and Informatics, vol. 3, no.1 pp. 40 – 52, 2011

6. Animesh Gupta, Kirti Srivastava, Hima Bindu Maringanti, " Mobile based Interaction System for the Paralyzed", Journal of Computing, JoC, published by Global Science and Technology Forum, GSTF , ISSN: 2010-2283 Singapore, Vol 2, No 4, pp. 93-96, Feb 2011.

7. Saxena, Vikas, and Gupta, J.P., "A Novel Watermarking Scheme for JPEG Images", WSEAS Transaction on Signal Processing, Issue 2, vol. 5, ISSN: 1790-5022, pp. 74- 84, February 2009.

8. Saxena, Vikas, and Gupta, J.P., "A Novel Collusion Attack Resistant Watermarking Scheme for Color Images", IAENG International Journal of Computer Science, vol. 34, Issue. 2, ISSN: 1819-656X, pp. 171-177, December 2007.

9. Megha Rathi, Arun K Singh,"Breast Cancer Prediction using Naive Bayes Classifier",International Journal of Information Technology & Systems, Vol. 1; No. 2: ISSN: 2277-9825 (July-Dec. 2012).

10. Pooja Gupta, Sandeep Kr Singh, Divakar Yadav and A. K. Sharma, " An Improved Approach to Rank Web Document", Journal of Information Processing System, vol 9, vo. 2, pp 217-236, June 2013.

Mukta Goyal, Divakar Yadav, and Alka Choubey, "E-learning: Current State of Art and Future Prospects", International Journal of Computer Science Issues, Volume 9, I

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Awarded:
1. Design of interventions for instructional reform in software development education for competency enhancement
2. An Examination of the Relationship between Emotional Intelligence, Leadership Styles and Leadership Effectiveness
3. Design of microstrip antenna conformable to both planar and cylindrical surfaces for aircraft Systems.
4. Investigating Determinants of sweetness of Sweet molecules

Ongoing:
1. Design of Resource Allocation, Scalability Schemes in Cloud and Distributed Environments.
2. Cost effective design for automation of agriculture that suits the Indian farmer.
3. Context-Sensitive Access Control and Pseudonymization approach for security of Electronic Health Record
4. Personalization in E-learning.
5. Tamil Language Processing.
6. Named Entity Recognition for Indian Languages as A Utility of Part of Speech Tagging.
7. Accurate, Early and Possibly automated Prediction and Preoperative Diagnosis of Gynecological Cancers exploiting Medical Images.
8. Trust based Security in Cloud Computing.
9. Current Security Issues and Trust Management Schemes in Mobile Ad hoc network.
10. Gesture Recognition for Collaborative work.
11. Energy latency trade-off for real time Wireless Sensor Systems.
12. Improving Software Quality with Effective Defect Prevention.
13. Preventing run time attacks and securing iOS devices using test driven approach.
14. Cloud Computing and its Issues.
15. Energy efficiency in Mobile ad-hoc Networks.
16. Energy Efficient Routing Protocols in WSN.
17. Sentiment Analysis.
18. Medical image processing using AI Techniques.
19. On line Social Media Analysis.
20. Sentiment Analysis & Opinion Mining on Online Social Networks.
21. Effect of work environment on happiness and welling being of employees.
22. Leadership and Emotional Intelligence.
23. A Study on Social Networking Usage Pattern within Indian Software Organizations.
24. Total factor productivity growth of Indian agriculture: The role of R&D investments.
25. Adjustment Pattern of Elderly in Delhi and NCR
26. Gender Differences in Technologies Adoption: An Empirical Study on STOC on Digital Library.
27. Development of Sustainable Supply Chain Management Framework for IT Products: An exploratory study
28. Developing a Composite e-Environment Sustainability Index (CeESI) for Information Technology Enabled Services segment of IT Industry
29. Effect of Organizational Justice and Psychological Capital on Employee Wellbeing and Turnover Intentions- Study of IT Sector
30. Management of hotel waste: An Inevitable Strategy for Profitability and Sustainability.
31. Propagation characteristics of TE and TM Modes in non-uniform circular cylindrical waveguides for Gyromonotron and Gyro-TWT Applications
32. Design and analysis of microstrip antenna conformal to Non Planar Surface
33. Small signal field analysis of Gyro-TWT amplifier.

34. Computational analysis and docking studies of microbial genomes to identify disease target gene/drugs.
35. An automated pipeline of inverse docking method: for predicting protein targets for a given drug molecule.
36. Constructing comprehensive map of molecules implicated in obesity using computational approaches.

Some Ongoing / Completed M.Tech Dissertations:
   Prayag - Centre for Knowledge Informatics for Sustainable Development
Ongoing
   1. Automatic Tagging and semantic segmentation of online lecture videos
   2. Evaluation and training of Kathak body postures and hand gestures using motion capture technology
   3. Health Care Application in Android
   4. Community Detection in Social Network
   5. Smart Cloud: Cloud Services on the GO
   6. Efficient Energy Proficiency of LEACH
   7. Energy Efficient Routing Protocol for Wireless Sensor Network
   8. Vehicular Traffic MGMT by ACO
   9. Individualizing the test sheet for the student according to Bloom's Taxonomy using particle swarm optimization in E- Learning System
   10. A Greedy Algorithm for Load Balancing in Cloud Computing
   11. Recognition of printed Devnagri script of different from styles by using soft computing
   12. Automatic generation of test sheets using genetic algorithm
   13. Analysis, development and evaluation of mobile system enabled e- book learning system
   14. Development of tools for repositioning of drugs.
   15. Development of web enabled portal for side effects prediction.
   16. Pharmacophore and QSAR modeling of acridones derivative.
   17. Computational studies of anti-cancerous peptides.
   18. Channel estimation in indoor visible light communication
   19. Spectrum sensing in cognitive radio
   20. PAPR reduction in OFDM Systems
   21. PTS based PAPR Reduction in OFDM Systems
   22. Dual band patch antenna for wireless application using frequency 2.4 and 5.2 Ghz
   23. Gyro-TWT Analysis
   24. Analysis of vane loaded circular cylindrical waveguide for Gyro-TWT Applications
   25. Digital image forensics of contrast enhanced images
   26. Study and implementation of PID controller for DC motor
   27. Short delay defects in VLSI testing
   28. Low power & area efficient design of BCD adder on FPGA
   29. Circuit designing using organic thin film transistor

Completed
   1. Reliable & energy efficient routing protocol for MANET
   2. Enhancing cloud quality of service using trust management
   3. Adaptive data migration for disaster recovery using cloud computing
   4. Scheduling service oriented workflows inside cloud using an adaptive agent based approach
   5. Ensure outsourced data security in private cloud environment
   6. Development of SaaS and PaaS for cloud environment
   7. Providing software as a service in cloud computing using virtualization technology
   8. QoS aware virtualization simulator in cloud computing
   9. Cloud desktop exploring cloud computing services
   10. Bowling game using gesture recognition
   11. Evolutionary approach to solve maze problems/board games using ant colony optimization
   12. Implementation of data integrity in cloud data storage
   13. Predictive analysis of lung cancer recurrence
   14. Audiowarship: a game for blind people

15. Building and evaluating virtualized application in cloud environment
16. Future path prediction of moving object on road by analyzing past trajectories data
17. Medical image reconstruction using content adaptive mesh model
18. Secure and efficient digital certificate management for MANETs
19. Performance analysis and composition of signatures for misuse intrusion detection system using artificial intelligence
20. Network behaviour monitoring and analysis for detection and resistance of denial of services attacks
21. Digital reconstruction of Dravidian Architecture symbols
22. Multilayer Intrusion Detection System for Infrastructure – as – a Service Provider on cloud.
23. Development of Computational genomic tools.
24. Systems biology of obesity induced hypertension.
25. Construction of pathways involved in obesity induced diabetes mellitus using systems biology approaches.
26. Computational analysis of Mobile Genetic Elements (MGE).
27. Computational study of pathophysiology of obesity induced cardiovascular diseases.
28. Computational analysis of mobile genetic elements.
29. Comparative study of bacterial genomes using horizontal gene transfer.
30. Comparative analysis of retrotransposons.
31. Design an integrated computational and statistical system for mutational study in marR protein in mutational study in marR protein in enterobacteriales.
32. Frequency distribution analysis in 23s rRNA sequences of streptococcus & helicobacter sp. using mutual information theory.
33. Comparative study of microbial proteomes using phylogenetic profiling.
34. In silico study of protein-protein interactions of Argonaute proteins in higher eukaryotes.
35. To investigate the possible mechanism of inhibition by Apocynin towards NADPH oxidase.
36. In silico investigation of vasicine molecule as a potent inhibitor of Myeloperoxidase.
37. Molecular Docking and Knockdown Study of Glucosamine-6-phosphate synthase a potential antifungal target of Rhizopus oryzae.
38. Computational analysis of Vasicine as a potential inhibitor of nitric oxide synthase.
39. Phylogenetic Analysis for Knockdown Study of Glucosamine-6-phosphate synthase in Rhizopus oryzae.
40. Computational studies on antimicrobial activity of bioactive peptides.
41. In silico investigation of vasicine molecule as a potent inhibitor of Myeloperoxidase.
42. To investigate the possible mechanism of inhibition by Apocynin towards NADPH oxidase.
43. Computational study of inversion polymorphism in Dipterans.
44. Computational analysis of crucial elements for GLUT 4 Translocation in insulin signaling pathway.
45. In-silico Identification of miRNA and their target sites in cardiac hypertrophy.
46. Comparative genome analysis and protein function prediction.
47. Molecular evolutionary study of Anopheles culicifacies.
48. Channel estimation and PAPR in OFDM systems
49. Resource allocation in OFDMA and MIMO system
50. Control of home-appliances through IR interface using web (GPRS) enabled mobile phones
51. Performance analysis of non-linearities in Wireless System
52. Efficient and economical air-interface telecom network design using MIMO system
53. Adaptive radio resource allocation in multicast OFDMA systems
54. Noise reduction using adaptive empirical mode decomposition
55. Video compression using different image coders and reversible variable length codes
56. Vehicle speed measurement for accident scene investigation
57. Design of CMOS based PTAT circuit for temperature sensor and bandgap reference Circuit on 0.35 micron technology

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Some Ongoing/ Completed B. Tech Projects

Ongoing

1. Commuting made easy
2. Application of hadoop framework with security of cloud data
3. Data aggregation with cloud computing
4. Privacy preserving public auditing for secure data storage in cloud
5. Application migration on open source virtual machine for cloud environment
6. Cloud based university mgmt. system
7. Scheduler enhancement
8. Automated plant watering system
9. Maximizing security of data and user access over cloud
10. Traffic signal detection and tracking
11. Image compression and its practical implementation
12. Virtualization of the tutorial board
13. Automatic subtitle generation for sound in videos
14. Kidney stone detection system
15. Andromo (android based real time motion positioning)
16. Android application of attendance mgmt
17. Delhi trip planner
18. Fly space :: work space on fly
19. Emergency call
20. Location based discovery and information dissemination
21. Speed breaker early warning system
22. Help-in-hand
23. Personal recommendation system
24. Forecast daily solar energy with previous data and ensemble of weather models
25. Sentiment analysis of reviews on educational institutions
26. Graph theoretic approach to Hindi text summarization
27. Hindi Tamil text trans.
28. Shallow parser for Hindi language
29. Language translation
30. Adaptive e-learning system
31. Educational app. using kinect
32. E-learning based on cloud computing
33. Adaptive e-learning
34. Detection of copied codes or malpractices in code cloning
35. Online course system
36. Passive techniques for image tempering detection
37. Image forgery detection
38. Computer forensics
39. Detection of copied codes or malpractices in code cloning
40. Security application through forensic.
41. PAPR reduction in MIMO OFDM System
42. PAPR reduction in OFDM System with Index Modulation
43. Spectrum sensing in cognitive radio
44. Transmission capacity in next generation networks

45. Power line communication based on OFDM
46. Mail sorting system using RFID
47. DFT spreading technique to reduce PAPR in OFDM system
48. PAPR reduction in OFDM system
49. Sidelobes suppression and PAPR reduction in OFDM systems
50. BER comparison between traditional and Wavelet Packet based OFDM
51. Peak to average power reduction in OFDM
52. PAPR reduction using dummy sequence insertion based PTS
53. PAPR reduction of OFDM using modified PTS (using search algorithms)
54. PAPR reduction of OFDM using PTS without side information
55. A comparison of PAPR reduction techniques for orthogonal frequency division multiplexing (OFDM)
56. Automatic wireless health monitoring system in hospitals for patients
57. Performance of various modulation schemes in MIMO systems over wireless channel
58. Analysis of quantum efficiency of solar cell
59. Design and Analysis of rectangular patch antenna
60. Analyzing the performance and energy metrics of CMOS inverter at 350nm
61. The realization and study of second generation dual-x current conveyor (DXCC-II) and its application
62. Power and delay analysis of sense amplifier
63. Hardware designing of a Piezoelectric sensor
64. Implementation of a Memristor model using MATLAB
65. 8 byte static read write memory using CMOS.
66. Network based strategies for drug target identification in microbes.
67. Understanding genomic features using comparative genomics approaches.
68. ITS region as molecular identification marker in fungal species.

Completed

1. Speech Recognition & Synthesis Technology for People With Disabilities
2. Electronics TOLL Collection
3. A System for Analysis of Feedback Forms
4. A novel mp3 - the music with senses
5. Content based retrieval system for archaeological images
6. Art gallery search engine
7. Biometric security system via finger prints
8. Implementation of genetic algorithm on clustered computers in solving traveling salesman problem
9. Integration, analysis and prediction of psychological and learning aspects of students
10. E-LEARNING
11. Bluetooth Based E-Learning System
12. Licensed software authorization
13. Road Traffic Simulation
14. Energy Efficient Communication for manets
15. Global Positioning Surveillance System
16. Automated software analysis for parallel computing
17. Extending Fault Tolerance and Parallel I/o for Parallel Programs Using MPI
18. Application of Image processing techniques to approximate natural resources of an area.
19. Music Compression Control System
20. Emotion Detection
21. Automated Direction Controlled Vehicle
22. Multi chat & desktop sharing - an information sharing system
23. Soft - phone : internet telephony
24. Decision support system for health care specialists: a fuzzy data mining approach.
25. A gesture recognition architecture for American sign language
26. Ontology learning & creating a word net based bilingual treasurers
27. Expert system for dental surgeon

28. Ensuring Privacy in Health Information System
29. Wireless based Vehicle Space tracking system
30. Doctors Tracking system using radio Frequency
31. Smart Card Implementation
32. Visually Enabled Nuclear Arm
33. "Kahani-Kaar" - Interactive Digital Storytelling, your way
34. Children Gaming (using object & sound recognition)
35. Gesture-based Interaction for the Paralyzed
36. Guitar Play
37. Intelligent terrain mapping
38. Interactive story telling tool
39. Proenvironmental City Planner - A Computer Game
40. Storyline Animation Using Flash
41. An Application S/W on Regional Transport Office
42. Auto - Attendance Marker
43. Automated Response System
44. Customized Virtual Garment Design/A user-friendly Marketing Decision Support System
45. Disaster Management System: A Multi Agent Approach
46. SMALL AND MEDIUM ENTERPRISE GURU CUSTOMER RELATIONSHIP MANAGEMENT SUITE
47. Telugu Language Processor
48. E-Learning- Multiagent approach
49. Enhancing University's competitiveness through ICT based Knowledge Management System
50. Collaborative Academic Repository
51. Haptic device for Learning and Entertainment
52. Intelligent Tutoring System for Learning Disabled Children
53. Interactive Environmental Study
54. Virtual Teaching System
55. Sports management system
56. Time Table Management
57. Tracking system for Commonwealth games
58. Vehicle Tracking System
59. Virtual Medicare System
60. Web Based Hospital management System-Multiagent approach
61. Web Based multiagent System: A Solution for Polio Vaccination Programme
62. Advance traffic management system using sensor networks
63. Server to client lecture capture and transmission
64. Traffic congestion control and alternative path finding using gps navigation
65. Bluetooth location tracker
66. Travelling guide using data caching
67. Distributed parallel storage system
68. Green os: future low power operating system
69. Vehicle intelligence with system transport application
70. Dial-in assistant
71. Medical imaging and denoising
72. Vision based gaming
73. Diagnosis and helping the children suffering from autism
74. Animatronics an interactive tool to create multimedia comics
75. Multimedia software tool for deaf and dumb people using indian sign language (saathi)
76. Design & development of 3d car racing game & improving its interactivity by different means of input.
77. Video compression
78. Vehicle registration number recognition (vrnr)
79. Interactive classroom system
80. Content management system for an online newspaper
81. Sms enabled route tracking system
82. Digital library of indian monuments

83. Complete campus solution
84. A convenient online e voting approach for indian scenario
85. Using an optimal and fair algorithm to the carpool problem and developing a web enabled carpool system
86. Information repository for water resources ngo (india water foundation)
87. Automated and intelligent online cancer diagnosis system
88. University recommendation system
89. Intelligent online medical diagnosis system
90. Rural healthcare management system using mobile technology
91. Cybler: a web based virtual classroom
92. Novel recommendation system for travelers
93. Emotion detection using voice tone analysis
94. Auto hindi text summarization tool
95. Air quality information system
96. Discovery of patterns in climatic conditions
97. Multiagent intelligent travel planning using cbr and ga
98. Computation of user- based query using natural language processing   case study: health domain
99. Basic calculus learning tool
100. Risk analysis tool
101. Campus recruitment facilitation system
102. A plug-in for inline search   developed on cloud google app engine
103. Ant colony algorithm in manet
104. Development of cloud computing application using amazon's elastic map reduce
105. Simulation of traffic flow and effective management of traffic lights
106. Support application for cloud
107. SERVICES TO INDIAN RAILWAY SYSTEMS
108. AUGMENTED REALITY THEME PARK FOR KIDS
109. CBIR IN MEDICAL IMAGE
110. Classification of Skin Cancer Through Image Processing
111. Robotics Curriculum Designing for School Children
112. Swar-Indian Sign Language Interpretation
113. TRANSLINK: INTEGRATED TOURIST INFORMATION MANAGEMENT SYSTEM
114. VOLUME RENDERING USING MEDICAL DATA
115. An E-LEARNING System Based on Learner's Cognitive Model and Learning Resource Adaption
116. COURSE RECOMMENDATION FORUM
117. Kmportal – A Knowledge Management Portal for JIITU
118. MOBILE HEALTHCARE APPLICATION
119. MULTILINGUAL LEARNING MANAGEMENT SYSTEM
120. MY BOOKMARKS(A Facebook Application for Online Bookmark Storage)
121. NCR Almanac – Compiled NCR Cyclopedia
122. Online Quiz Application
123. PERFORMANCE ANALYSIS OF ONLINE TEACHING SYSTEM
124. Genetic algorithm based adaptive e-learning scheme and test generator
125. Hindi speech to text converter
126. Performance analysis of online teaching system
127. A predictive health analysis
128. A tool for automatic video surveillance through multiple cameras
129. A vision-based approach to early detection of drowning incidents in swimming pools
130. Automatic paper checking tool
131. E- HEALTH RECORDS (Patient Health Information System)
132. Cloud OS
133. Dynamically exchanged information through cloud
134. Performance analysis in Cloud Comp
135. Resource Sharing on cloud/Cryptography
136. Rural health care app on cloud
137. Traffic Management through vanets (Vehicular adhoc networks)

138. Visualization network traffic as 2-D image for analogy detection.
139. Automated pot watering system
140. Autonomous Unmanned Aerial Vehicle
141. A Cost Optimized Robotic Entertainment Solution with Assistive Technology for the Vocally Impaired
142. A toolkit for real time depth from a moving camera with application for Blind.
143. Criminal identification using face detection technique
144. Diseases diagnostic system using MRI data classification
145. English Conversion
146. Kahanikar - An Interactive Multimedia Story Teller
147. Qutub engraved with history: Virtual exploratium
148. Recognition and classification of skin cancer using image processing
149. IT for blind
150. Mining the E-Business
151. Multiple Communication channel between students and fileserver
152. Synchronization and personalizing response system for university
153. AADHAR - A Tracking System for Immunization and education in India
154. An Intelligent Machine for old age people/ patients
155. Android GPS Tracker & Live Locator
156. Automated mathematical problem solving tool(using NLP)
157. Cloud base virtual shopping
158. Data mining for medical applications
159. Drishti - A reading tool for the blind
160. Gesture based fun and learning interactive tool
161. Healthcare application for disease prediction
162. Hybrid of Different SVM based classifiers and genetic algorithm for prospects of breast cancer survivability
163. Intelligent smart English tutor
164. Intelligent System on Healthcare
165. Map learning by ART2MAP
166. Novel medical diagnosis using Artificial Intelligence
167. Prediction of Type II diabetes mellitus
168. Synchronization and personalizing response system for university
169. Vehicle for physically challenged
170. Vision based assistance for vehicular navigation Erp for college
171. Time table generator
172. Develop a visualization technique for detection of congestion control exploits for high speed TCP variants
173. Cloud virtualization
174. Application of sensors in medical field
175. Implementation of PAAS in cloud computing
176. Remote Desktop control using cloud computing
177. Bushido - Self defense training unit
178. Breast cancer diagnosis
179. Virtual Reality - Bowling game using hand gesture
180. Video Cartoonization
181. School it solution
182. Cancer Detection
183. Hindi Summarizer and QA System.
184. Peak to Average Power Reduction in OFDM
185. PAPR reduction and ICI cancellation of OFDM system
186. Spectrum sensing in cognitive radio
187. Performance analysis of MIMO-OFDM transmission schemes and equalization techniques
188. Reduction of PAPR Of OFDM signals using companding transforms
189. Performance analysis of coherent optical receivers
190. Sidelobe suppression technique in an OFDM based cognitive radio
191. Throughput analysis in TDD-LTE & FDD-LTE systems

192. Performance study of MIMO space time coded systems
193. Adaptive bit allocation for OFDM cognitive radio systems
194. Ultra high capacity DWDM transmission system
195. Reduction of PAPR of OFDM signals using companding transforms
196. Localization of malicious nodes in an ad-hoc network
197. Study of indoor and outdoor wireless channel models
198. Impact of node positioning and energy efficiency in wireless sensor networks
199. Study of exposed node problem and comparison of its throughput to that of the hidden node problem in 802.11 Wireless networks
200. Performance study of wireless channels
201. Noise minimization and channel estimation techniques
202. Prospective exploration of spectrum opportunities in cognitive radio
203. Improvement of PAPR by LDPC codes with PTS in PFDM signals
204. Analysis of turbo coded OFDM System in various fading environments.[Performance measure-BER (Bit Error Rate)]
205. Virtual capacity allocation and reduction in call establishment delay
206. Energy efficiency in ZIGBEE networks (Design of ZIGBEE Transceiver and its modeling)
207. Design and optimization of microstrip patch antenna for increased bandwidth.
208. Microstrip patch antenna designs.
209. Multi-dielectric layers microstrip antenna.
210. Plane wave reflection coefficient from near field measurement
211. Onlinear pulse propagation in a weakly birefringent optical fiber: Derivation and approximate solution of coupled nonlinear Schodinger equations
212. Study of acoustics in porous medium
213. Watermarking for Image and compressed video
214. EEG signal classification for brain computer interface
215. Digital camera forensic methods
216. Distance regularization technique for closed contour segmentation in ultrasound images
217. Alpha estimation in natural Image
218. Data compressions: MP3 and EZW
219. Segmentation of ultrasound images of Gall bladder
220. Study and implementation of video codec: MPEG 4
221. Personalized computer with speech recognition for paralytic patients
222. Heart Rate meter and analysis of heart rate variability
223. Detailed study and implementation of connectivity modules in android application using ECLIPSE
224. GSM based home automation with intensity control
225. Smart traffic light system
226. Power reduction of VLSI circuits using optimization algorithms
227. Low power dissipation in a multiplier
228. CMOS Schmitt trigger circuit with controllable hysteresis using logical threshold voltage control circuit
229. Realization of electronically tunable multi-mode active-C BI-QUAD filters using OTAs
230. SWARM di-BOTICS.. the evolution of "SYNCHRONIZED" machines and study of Drone technology
231. Design and implementation of ethernet based home automation
232. Implementing Memristor model in Verilog
233. Integration of SAW device and delay line for the development of oscillator based Temperature/Gas sensor
234. Filter design using Virtex-4 FPGA
235. Layout of analog and digital basic building blocks
236. Combinatorial circuit design using Genetic Algorithm
237. Electronically Tunable Voltage mode Bi-Quad filter/oscillator based on CCCCTA
238. Pilot based estimation in MIMO OFDM system
239. A Space-Time -Frequency Diversity Scheme for MIMO-OFDM system
240. Elapsed time of ongoing calls of same rate for assignment
241. Intelligence on Wireless security and surveillance system

242. Study and implementation of video codec: MPEG 4
243. Image enhancement of color images by scaling DCT co-efficients and removal of blocking artifacts.
244. Analysis of siRNA sequences involved in cervical cancer gene silencing.
245. Development of characterization strategies for Hypothetical Gene Sequence and Proteins.
246. Computational Prediction and Modeling of 23 S rRNA Mutations.
247. Comparative analysis of MAR locus in Enterobacteriaceae members.
248. A comparative analysis of SiRNA prediction tools.
249. Analysis of Protein Folding Trajectories.
250. Development of Web enabled Database of SiRNA Delivery Systems available for In Vivo.
251. Streptomyces Information system.
252. To study the selected pathways for effective inhibition in Rhizopus Oryzae.
253. Functional Genomics and Network biology of pathogenic microbes.
254. Identification of drug target using comparative genomics and pathways modeling approaches in microbes.
255. Development of MedHealth Plex System.
256. Exploring genomic boundaries.
257. Development of annotation system of disease genes.
258. Medhealth System.
259. Exploring genomic boundaries: signals at TSS.
260. Development of genome annotation tools.
261. Development of automated tools for inverse docking.
262. To understand network biology tools and identify drug targets.
263. Analysis of Drug Targets using computational approaches.
264. Mining of NmU gene 5' flanking region for transcription regulatory domains.
265. Domain Mapping of Chikv Nsp's involved in Viral Protein Interaction.
266. Mapping of Chikungunya Envelope protein Interactions.
267. Mapping of Protein interaction domain of N protein of Chandipura virus.
268. Molecular phylogeny of Indian Drosophila species: a multilocus approach.
269. Stress-induced gene expression profiling: insights from Drosophila.