Perspective Plan and Deployment Documents

PERSPECTIVE PLAN

Following is the perspective plan of the college

1. **Enhancing the quality of Teaching – Learning Process**
2. **Promotion of research among staff and student**
3. **Talent acquisition and retention**
4. **Quality Assurance Measures**
5. **Improving Entrepreneurship Development and Industry – Institute – Interaction**
6. **Placement and Training Activities**

The details are as follows:

1. **Enhancing the quality of Teaching – Learning**
   - ✓ To provide more student-centric teaching – learning methodology
   - ✓ Up-gradation of skills of staff through, FDP, QIP, web learning through NPTEL, etc
   - ✓ Creating infrastructure to use modern teaching aid
   - ✓ Industry interface through summer internship
   - ✓ Undertaking field project with participation from the industry
2. **Promotion of Research among staff and students**
   - ✓ Providing platform to the faculty and students for R & D activities
   - ✓ Encouraging faculty members to undertake research work and research publication in a reputed journal, conferences, etc
   - ✓ Encouraging & motivating students to attend conferences, workshops, undertake the project of research orientation, publish their research/review papers, etc
   - ✓ Inviting experts and eminent person on research committee for evaluating progress of research activities is in various departments.
   - ✓ Taking efforts to undertake sponsored research project
3. **Talent Acquisition and Retention**

   - ✓ Providing a transparent recruitment and selection process.
   - ✓ Providing career growth prospects
   - ✓ Having a transparent promotion policy
   - ✓ Effective Welfare measures for teaching and non teaching staff
4. **Quality Assurance Measures**

   - ✓ Accreditation of all the courses
   - ✓ Participating in NIRF
   - ✓ Quality improvement through Internal Quality Assurance Cell (IQAC)

5. Improving Entrepreneurship Development Industry-Institution Interaction

- ✓ Providing an eco system for startups
- ✓ Organizing entrepreneurship awareness programmes for students
- ✓ Providing platform to the students to undertake internship in related industries
- ✓ Providing skill based training to the student.
- ✓ Signing MoU with organization/corporate/industry to exchange the knowledge and expertise in related program of engineering

6. Placement and Training Activities

- ✓ To enable students to be industry ready
- ✓ To achieve maximum placements
- ✓ To develop the overall personality of the students

LIST OF JOURNAL PUBLICATION 2020-21

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number
Deep-learning framework to detect lung abnormality â€" A study with chest X-Ray and lung CT scan images	Bhandary A., Prabhu G.A., Rajinikanth V., Thanaraj K.P., Satapathy S.C., Robbins D.E., Shasky C., Zhang Y.-D., Tavares J.M.R.S., Raja N.S.M.	Electronics and Instrumentation Engineering	Pattern Recognition Letters	2020	1678655
Computer-Aided Gastrointestinal Diseases Analysis from Wireless Capsule Endoscopy: A Framework of Best Features Selection	Khan M.A., Kadry S., Alhaisoni M., Nam Y., Zhang Y., Rajinikanth V., Sarfraz M.S.	Electronics and Instrumentation Engineering	IEEE Access	2020	21693536
Social Group Optimizationâ€"Assisted Kapurâ€™s Entropy and Morphological Segmentation for Automated Detection of COVID-19 Infection from Computed Tomography Images	Dey N., Rajinikanth V., Fong S.J., Kaiser M.S., Mahmud M.	Electronics and Instrumentation Engineering	Cognitive Computation	2020	18669956

Title	Authors	Department	Journal	Year	ISSN
Optimization and techno-economic analysis of biodiesel production from Calophyllum inophyllum oil using heterogeneous nanocatalyst	Naveenkumar R., Baskar G.	Biotechnology	Bioresource Technology	2020	9608524
A reliable framework for accurate brain image examination and treatment planning based on early diagnosis support for clinicians	Fernandes S.L., Tanik U.J., Rajinikanth V., Karthik K.A.	Electronics and Instrumentation Engineering	Neural Computing and Applications	2020	9410643
Weighted Mostar indices as measures of molecular peripheral shapes with applications to graphene, graphyne and graphdiyne nanoribbons	Arockiaraj M., Clement J., Tratnik N., Mushtaq S., Balasubramanian K.	Science and Humanities	SAR and QSAR in Environmental Research	2020	1062936X
Green synthesized rGO-AgNP hybrid nanocomposite - An effective antibacterial adsorbent for photocatalytic removal of DB-14 dye from aqueous solution	Karthik C., Swathi N., Caroline D.G.	Biotechnology	Journal of Environmental Chemical Engineering	2020	22133437

Title	Authors	Department	Journal	Year	ID
Schizophrenia detection using MultivariateEmpirical Mode Decomposition and entropy measures from multichannel EEG signal	Krishnan P.T., Joseph Raj A.N., Balasubramanian P., Chen Y.	Electronics and Instrumentation Engineering	Biocybernetics and Biomedical Engineering	2020	2085216
A customized VGG19 network with concatenation of deep and handcrafted features for brain tumor detection	Rajinikanth V., Raj A.N.J., Thanaraj K.P., Naik G.R.	Electronics and Instrumentation Engineering	Applied Sciences (Switzerland)	2020	20763417
Performance, emission, and combustion analysis on diesel engine fueled with blends of neem biodiesel/diesel/ additives	Rangabashiam D., Munuswamy D.B., Duraiswamy Balasubramanian S., Christopher D.	Mechanical Engineering	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2020	15567036
Automated heart sound classification system from unsegmented phonocardiogram (PCG) using deep neural network	Krishnan P.T., Balasubramanian P., Umapathy S.	Electronics and Instrumentation Engineering	Physical and Engineering Sciences in Medicine	2020	26624729
An Efficient Kernel FCM and Artificial Fish Swarm Optimization-Based Optimal Resource Allocation in Cloud	Albert P., Nanjappan M.	Computer Science	Journal of Circuits, Systems and Computers	2020	2181266

Title	Authors	Department	Journal	Year	ID
Deep neural network assisted diagnosis of time-frequency transformed electromyograms	Bakiya A., Kamalanand K., Rajinikanth V., Nayak R.S., Kadry S.	Electronics and Instrumentation Engineering	Multimedia Tools and Applications	2020	13807501
Multi-Objective Task Scheduling Using Hybrid Whale Genetic Optimization Algorithm in Heterogeneous Computing Environment	Natesan G., Chokkalingam A.	Computer Science and Engineering	Wireless Personal Communications	2020	9296212
Design of compact patch antenna with enhanced gain and bandwidth for 5G mm-wave applications	Ramanujam P., Arumugam C., Venkatesan R., Ponnusamy M.	Electronics and Communication	IET Microwaves, Antennas and Propagation	2020	17518725
Design of miniaturized super wideband printed monopole antenna operating from 0.7 to 18.5 GHz	Ramanujam P., Ramesh Venkatesan P.G., Arumugam C., Ponnusamy M.	Electronics and Communication	AEU - International Journal of Electronics and Communications	2020	14348411
Performance and emission characteristics of biodiesel derived from coconut acid oil	Rajasekar R., Ganesan S., Marynishanthi W.	Electrical and Electronnics	International Journal of Ambient Energy	2020	1430750
Electromagnetic interference suppression in stacked patch antenna using complementary split ring resonator	Ramanujam P., Venkatesan P.G.R., Arumugam C.	Electronics and Communication	Microwave and Optical Technology Letters	2020	8952477

Title	Authors	Department	Journal	Year	ISSN
Assessment of the emission characteristics of the diesel engine with nano-particle in neem biodiesel	Rathinam S., Sajin J.B., Subbiah G., Rajeev A., Prakash S., Christopherselvam D.	Mechanical Engineering	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2020	15567036
Genetic spider monkey-based routing protocol to increase the lifetime of the network and energy management in WSN	Soundaram J., Arumugam C.	Computer science and Engineering	International Journal of Communication Systems	2020	10745351
Design of Compact Highpass Filter for 5G mm-wave Applications Using Complementary Split Ring Resonator	Ramanujam P., Ramesh Venkatesan P.G., Arumugam C., Ponusamy M.	Electronics and Communication	Frequenz	2020	161136
A soft-computing based hybrid tool to extract the tumour section from brain MRI	Suresh K., Sakthi U.	Information Technology	Multimedia Tools and Applications	2020	13807501
Bioethanol production from Codium tomentosum residue	Gengiah K., Moses G.L.P., Baskar G.	Biotechnology	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2020	15567036
Human Tongue Thermography Could Be a Prognostic Tool for Prescreening the Type II Diabetes Mellitus	Thirunavukkarasu U., Umapathy S., Krishnan P.T., Janardanan K.	Electronics and Instrumentation Engineering	Evidence-based Complementary and Alternative Medicine	2020	1741427X

Title	Authors	Department	Journal	Year	ISSN
Extraction of Buildings in Urban Area for Surface Area Assessment from Satellite Imagery based on Morphological Building Index using SVM Classifier	Avudaiammal R., Elaveni P., Selvan S., Rajangam V.	Electronics and Communication	Journal of the Indian Society of Remote Sensing	2020	0255660X
A FTIR approach of green synthesized silver nanoparticles by Ocimum sanctum and Ocimum gratissimum on mung bean seeds	Karthik C., Suresh S., Sneha Mirulalini G., Kavitha S.	Biotechnology	Inorganic and Nano-Metal Chemistry	2020	24701556
An efficient hybrid fuzzyâ€ clustering driven 3Dâ€ modeling of magnetic resonance imagery for enhanced brain tumor diagnosis	Kanniappan S., Samiayya D., Durai Raj Vincent P.M., Srinivasan K., Jayakody D.N.K., Reina D.G., Inoue A.	Information Technology	Electronics (Switzerland)	2020	20799292
Development of eco-friendly concrete produced with Rice Husk Ash (RHA) based geopolymer	Annadurai S., Rathinam K., Kanagarajan V.	Civil	Advances in Concrete Construction	2020	22875301
Synthesis, characterization and anticancer activity of Î²-cyclodextrin-Asparaginase nanobiocomposite on prostate and lymphoma cancer cells	Baskar G., Supria Sree N.	Biotechnology	Journal of Drug Delivery Science and Technology	2020	17732247

Title	Authors	Department	Journal	Year	ISSN
Physical strength and Opto-electrical conductivity of L-Serine Phosphate single crystal for structural and photonics devices fabrication	Rajesh K., Krishnan P., Mani A., Anandan K., Gayathri K., Devendran P.	Science and Humanities	Materials Research Innovations	2020	14328917
Super-resolution mapping of hyperspectral satellite images using hybrid genetic algorithm	Amala Dhason H.G.C., Muthaia I., Sakthivel S.P., Shanmugam S.	Information Technology	IET Image Processing	2020	17519659
Genetic algorithm based key sequence generation for cipher system	Sudeepa K.B., Aithal G., Rajinikanth V., Satapathy S.C.	Electronics and Instrumentation Engineering	Pattern Recognition Letters	2020	1678655
Predictive Modelling and Optimization of Performance and Emissions of Acetylene Fuelled CI Engine Using ANN and RSM	Thodda G., Madhavan V.R., Thangavelu L.	Mechanical Engineering	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2020	15567036
Algal biomass as a source for novel oral nano-antimicrobial agent	Vikneshan M., Saravanakumar R., Mangaiyarkarasi R., Rajeshkumar S., Samuel S.R., Suganya M., Baskar G.	Biotechnology	Saudi Journal of Biological Sciences	2020	1319562X
Design of a compact printed lowpass filtering antenna with wideband harmonic suppression for automotive communication	Ramanujam P., Venkatesan P G R., Arumugam C., Ponnusamy M.	Electronics and Communication	International Journal of RF and Microwave Computer-Aided Engineering	2020	10964290

Title	Authors	Department	Journal	Year	Code
Experimental investigation and ANN modelling of the effects of diesel/gasoline premixing in a waste cooking oil-fuelled HCCI-DI engine	Leo G.M.L., Sekar S., Arivazhagan S.	Electronics and Communication	Journal of Thermal Analysis and Calorimetry	2020	13886150
Enhanced malic acid production using Aspergillus niger coupled with in situ product recovery	Iyyappan J., Baskar G., Bharathiraja B., Gopinath M.	Biotechnology	Bioresource Technology	2020	9608524
Modeling and performance investigation of 4 Ã—20Â Gbps underwater optical wireless communication link incorporating space division multiplexing of Hermite Gaussian modes	Malathy S., Singh M., Malhotra J., Vasudevan B., Dhasarathan V.	Electronics and Communication	Optical and Quantum Electronics	2020	3068919
Design of Compact UWB Filter Using Parallel-coupled Line and Circular Open-circuited Stubs	Ramanujam P., Arumugam C., Venkatesan P G R., Ponnusamy M.	Electronics and Communication	IETE Journal of Research	2020	3772063
An SETM Algorithm for Combating SSDF Attack in Cognitive Radio Networks	Tephillah S., Manickam J.M.L.	Electronics and Communication	Wireless Communications and Mobile Computing	2020	15308669

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Tensile and wear behaviour of friction stir welded AA5052 and AA6101-T6 aluminium alloys: Effect of welding parameters	Kasirajan G., Rengarajan S., Ashok Kumar R., Raghav G.R., Rao V.S., Nagarajan K.J.	Mechanical Engineering	Metallurgical Research and Technology	2020	22713646
Performance enhancement of a domestic refrigerator with nanoparticle enhanced PCM over the condenser side	Kumar M.P., Elakkiyadasan R., Sathishkumar N., Prabhu A.G., Balasubramanian T.	Mechanical Engineering	FME Transactions	2020	14512092
MPPT oscillations minimization in PV system by controlling non-linear dynamics in SEPIC DC-DC converter	Vaigundamoorthi M., Ramesh R., Prabhu V.V., Kumar K.A.	Electrical and Electronnics	International Journal of Electrical and Computer Engineering	2020	20888708
Impulse noise reduction using hybrid neuro-fuzzy filter with improved firefly algorithm from X-ray bio-images	Pugalenthi R., Oliver A.S., Anuradha M.	Computer Science and Engineering	International Journal of Imaging Systems and Technology	2020	8999457
Time domain analysis on myoelectric activity of masseter muscles in resting and chewing conditions	Arockia Sukanya S., Kamalanand K., Thayumanavan B., Emmanuel C., Rajnikanth V.	Electronics and Instrumentation Engineering	Network Modeling Analysis in Health Informatics and Bioinformatics	2020	21926662
Optimal design for SCAP/battery power management applied in electric vehicle (EV) applications: a KHOâ€"RDF technique	Ponnupandian A., Veeramani V.P.	Electrical and Electronnics	Soft Computing	2020	14327643

Abrasive water jet piercing of inclined holes on ceramic coated nickel superalloy: A preliminary study	Yuvaraj N., Arunkumar N., Nivetha M.S., Lina Esther A.	Mechanical Engineering	Manufacturing Letters	2020	22138463
Anatomical region segmentation method from dermoscopic images of pigmented skin lesions	Chakkaravarthy A.P., Chandrasekar A.	Computer Science and Engineering	International Journal of Imaging Systems and Technology	2020	8999457
Comparative Analysis for the Detection of Marine Vessels from Satellite Images Using FCM and Marker-Controlled Watershed Segmentation Algorithm	Heltin Genitha C., Sowmya M., Sri T.	Information Technology	Journal of the Indian Society of Remote Sensing	2020	0255660X
Automated damage detection and characterization of polymer composite images using Tsallis-particle swarm optimization-based multilevel threshold and multifractals	Agastinose Ronickom J.F., Retnakaran Sobhana A., Robert F., Nadaradjane S.M.R., Chelliah S.K.	Electronics and Instrumentation Engineering	Polymer Composites	2020	2728397

Novel report on structural, optical and electrical investigation into brucinium 4-methyl-3-nitrobenzoate 0.5 hydrate single crystal: a promising material for high-power laser, ultrahigh cooling, sensor and detector applications	Kandhan S., Krishnan P., Vansu E., Sahoo T., Jagan R., Srinivasan S., Aravindhan S., Gunasekaran S., Anbalagan G.	Science and Humanities	Journal of Materials Science	2020	222461
Anticancer activity of gelatin-asparaginase nanobiocomposite against cervical and brain cancer cell lines	Baskar G., Supria Sree N.	Biotechnology	Journal of Drug Delivery Science and Technology	2020	17732247
Convolutional neural network in the detection of lung carcinoma using transfer learning approach	Lakshmi D., Thanaraj K.P., Arunmozhi M.	Electronics and Communication	International Journal of Imaging Systems and Technology	2020	8999457
Synthesis, structural, tunable-luminescence spectra and quenching behaviour of Sm3+ions activated Ba1-xBixTiO3 phosphors for LED applications	Arulmozhi A., Vishista K., Subalakshmi G.	Electronics and Communication	Optik	2020	304026

Application of proteometric approach for identification of functional mutant sites to improve the binding affinity of anticancer biologic trastuzumab with its antigen human epidermal growth factor receptor 2	Balakrishnan N., Gurunathan B., Surapaneni K.M.	Biotechnology	Journal of Molecular Recognition	2020	9523499
LP based solution for security constrained optimal power flow including power routers	Harini D., Ramesh Babu M., Venkatesh Kumar C.	Electrical and Electronnics	WSEAS Transactions on Power Systems	2020	17905060
Partial array grammars and partial array-rewriting P systems	Sasikala K., Kalyani T., Thomas D.G.	Science and Humanities	Mathematics in Engineering, Science and Aerospace	2020	20413165
Comparative studies and analysis on gasification of coconut shells and corn cobs in a perforated fixed bed downdraft reactor by admitting air through equally spaced conduits	Arun K., Venkata Ramanan M., Mohanasutan S.	Mechanical Engineering	Biomass Conversion and Biorefinery	2020	21906815
A new three-phase multilevel DC-link inverter topology with reduced switch count for photovoltaic applications	Anbarasan P., Krishnakumar V., Ramkumar S., Venkatesan S.	Electrical and Electronnics	Circuit World	2020	3056120

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Energy efficient dynamic clustering routing protocol in underwater wireless sensor networks	Gomathi R.M., Martin Leo Manickam J., Sivasangari A., Ajitha P.	Electronics and Communication	International Journal of Networking and Virtual Organisations	2020	14709503
Energy and exergy analysis of greenhouse drying of ivy gourd and Turkey berry	Subramani S., Dana S.S., Natesan V.T., Mary L.L.G.	Mechanical Engineering	Thermal Science	2020	3549836
Video content analysis and retrieval system using video storytelling and indexing techniques	Jacob J., Elayidom M.S., Devassia V.P.	Electrical and Electronnics	International Journal of Electrical and Computer Engineering	2020	20888708
Improved iot-based control system combined with an advanced control management server-based system	Jain S., Chinnaiah B., Rajakumar M.P., Fantin Irudaya Raj E., Jotiram G.A.	Computer science and Engineering	Journal of Green Engineering	2020	19044720
Ontology-based crop production using natural language processing with IoT applications using deep learning approach	Deepa R., Priyadharshini K.	Information Technology	Journal of Green Engineering	2020	19044720
Cassia javanica biodiesel blends with sio2 nanoparticles for ic engine applications	Karthikeyan M., Nambirajan S., Baskar G., Renganathan S.	Biotechnology	Indian Journal of Chemical Technology	2020	0971457X

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Antidiabetic potential of Andrographis echioides Nees. leaf extract on high fat diet-fed C57BL/6J diabetic mice	Sindhu S., Sivakumar K., Karthikeyan V., Jacob J.P.	Biotechnology	Pakistan Journal of Pharmaceutical Sciences	2020	1011601X
Data logger for monitoring and control of energy consumption in residential buildings using programmable logic controller	Pradeep J., Balasubramanian V., Shanthi P., Anbazhagan A., Senthil Nayagam V.	Information Technology	Journal of Green Engineering	2020	19044720
PV module integrated dual boost three-port DC-DC converter-fed T-type multilevel inverter for shunt active power filters	Vinoth K., Ramesh Babu M.	Electrical and Electronnics	Journal of Testing and Evaluation	2020	903973
Implementation of automated and decentralized pollution monitoring system with lo-ra wan	Anna Devi E., Ahila Devi E.	Instrumentation and Control	International Journal of Control and Automation	2020	20054297
Phytosynthesis and Characterization of Reduced Graphene Oxide using Aqueous Extract of Zingiber officinale and Brassica nigra	Karthik C., Swathi N., Devanand Venkatasubbu G.	Biotechnology	International Journal of Nanoscience	2020	0219581X
Identifying Partitions in Wireless Sensor Network	Anna Devi E., Martin Leo Manickam J.	Electronics and Communication	International Journal of Parallel Programming	2020	8857458

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Analysis of impact of emotional awareness on job performance of employees in the hospitals located in southern districts of tamilnadu-structural equation model	Karthick R., Manikandan N., Joel Jebadurai D.	Computer Science and Engineering	International Journal of Scientific and Technology Research	2020	22778616
Maximizing the quality of service in distributed multimedia streaming in heterogeneous wireless network	Duraimurugan S., Jayarin P.J.	Information Technology	Multimedia Tools and Applications	2020	13807501
A novel and an eco-friendly approach for organic dyes degradation using Spirulina platensis cultivated water	J S., P S., S S., M C.	Science and Humanities	Catalysis Today	2020	9205861
ZA-APA with adaptive zero attractor controller for variable sparsity environment	Radhika S., Chandrasekar A., Nirmalraj S.	Computer Science and Engineering	International Journal of Electronics and Telecommunications	2020	20818491
Backup node selection using particle swarm optimisation algorithm for cut node recovery in wireless sensor network	Devi E.A., Manickam J.M.L.	Electronics and Communication	International Journal of Business Information Systems	2020	17460972

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Experimental Investigation of Multi-Jet Air Impingement in Various Conditions and Analysis using Desirability Based Response Surface Methodology	Chandramohan P., Murugesan S.N., Arivazhagan S.	Mechanical Engineering	Journal of Applied Fluid Mechanics	2020	17353572
Stability analysis in Banach spaces for a general additive functional equation	Agilan P., Rassias J.M., Vallinayagam V.	Science and Humanities	Advances in Mathematics: Scientific Journal	2020	18578365
Interval oscillation criteria for second order nonlinear forced impulsive differential equations with damping term under variable delay	Purushothaman G.	Science and Humanities	Journal of Mathematical and Computational Science	2020	19275307
2 Ã— 20 Gbit/s OFDM-based FSO transmission system for HAP-to-ground links incorporating mode division multiplexing with enhanced detection	Praveen M., Vasudevan B., Ransom R.	Electronics and Communication	Journal of Optical Communications	2020	1734911
Effects of tool pin profile on tensile and wear behaviour of friction stir welded AA6101-T6 and AA1350 alloys	Ashok Kumar R., Muneeswaran R., Saravana Mohan M., Rengarajan S., Raghav G.R., Nagarajan K.J.	Mechanical Engineering	Metallurgical Research and Technology	2020	22713646

Bimagic of graphs merging from path and star	Shoba B., Solairaju A.	Science and Humanities	Advances in Mathematics: Scientific Journal	2020	18578365
Estimation of shortest path using dynamic programming through neutrosophic environment	Jose Parvin Praveena N., Sahayanatha Stalin N., Rajkumar A.	Science and Humanities	Advances in Mathematics: Scientific Journal	2020	18578365
Bi-magic labeling of graphs related to wheel and cycle	Shoba B., Solairaju A.	Science and Humanities	Advances in Mathematics: Scientific Journal	2020	18578365
Oscillation criteria for second order nonlinear forced impulsive differential equations with damping term under variable delay	Purushothaman G.	Science and Humanities	Advances in Mathematics: Scientific Journal	2020	18578365
Algorithm for constructing deterministic finite automata directly from regular expressions for pattern recognition related problems	Rajakumar M.P., Ramya J., Sonia R., Maheswari B.U.	Computer Science and Engineering	Advances in Mathematics: Scientific Journal	2020	18578365
Hepatotoxic effect of lead and hepatoprotective effect of Hydrilla verticillata on hepatic transcriptional and physiological response in edible fish Labeo rohita	Pandi Prabha S., Rajkumar J., Karthik C.	Biotechnology	Drug and Chemical Toxicology	2020	1480545

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A computationally efficient modified music spectrum for resolving doas of multiple closely spaced non-Gaussian sources	Ashok C., Venkateswaran N.	Electronics and Communication	Progress In Electromagnetics Research C	2020	19378718
Blocking probability-based admission control technique for QoS provisioning in WDM networks	Senkumar M.R., Chitra K., Selvakumar C.	Instrumentation and Control	International Journal of Operational Research	2020	17457645
A novel iterative demosaicing algorithm using fuzzy based dual tree wavelet transform	Niruban R., Deepa R., Vignesh G.D.	Electronics and Communication	Journal of Critical Reviews	2020	23945125
Context-sensitive contrastive feature-based opinion summarisation of online reviews	Lavanya S.K., Parvathavarthini B.	Computer Science and Engineering	International Journal of Enterprise Network Management	2020	17481252
Elements that elicit employee attrition at paragon digital services	Jawahar Rani K., Nirmala G.	MBA	International Journal of Advanced Science and Technology	2020	20054238
Grasshopper optimization algorithm utilized Xilinx controller for maximum power generation in photovoltaic system	Ram B.V.K., Chidambararaj N.	Electrical and Electronnics	Evolving Systems	2020	18686478

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Influence of human resource management practices on the organisational commitment with specific reference to selected hotels in Chennai	Dheera V.R., Krishnan J.	MBA	International Journal of Intelligent Enterprise	2020	17453232
Medical data assessment with traditional, machine-learning and deep-learning techniques	Lin H., Satapathy S.C., Rajinikanth V.	Electronics and Instrumentation Engineering	Current Medical Imaging	2020	15734056
Medical image examination using traditional and soft-computing approaches	Rajinikanth V.	Electronics and Instrumentation Engineering	Current Medical Imaging	2020	15734056
Chitin and chitosan-based support materials for enzyme immobilization and biotechnological applications	Verma M.L., Kumar S., Das A., Randhawa J.S., Chamundeeswari M.	Biotechnology	Environmental Chemistry Letters	2020	16103653
Carbohydrate and protein based biopolymeric nanoparticles: Current status and biotechnological applications	Verma M.L., Dhanya B.S., Sukriti, Rani V., Thakur M., Jeslin J., Kushwaha R.	Biotechnology	International Journal of Biological Macromolecules	2020	1418130
Electrodeionization theory, mechanism and environmental applications. A review	Rathi B.S., Kumar P.S.	Chemical Engineering	Environmental Chemistry Letters	2020	16103653

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Contemporary approaches towards augmentation of distinctive heterogeneous catalyst for sustainable biodiesel production	Ravi A., Gurunathan B., Rajendiran N., Varjani S., Gnansounou E., Pandey A., You S., Raman J.K., Ramanujam P.	Biotechnology	Environmental Technology and Innovation	2020	23521864
Photodynamic cancer therapy: role of Ag- and Au-based hybrid nano-photosensitizers	Dhanalekshmi K.I., Sangeetha K., Magesan P., Johnson J., Zhang X., Jayamoorthy K.	Science and Humanities	Journal of Biomolecular Structure and Dynamics	2020	7391102
Spectroscopic and third-order nonlinear optical properties of organic single-crystal 2-picolinictrichloroacetate: an overview	Manopradha N., Gowri S., Rama S., Selvaraju K., Kirubavathi K., Vinitha G.	Science and Humanities	Bulletin of Materials Science	2020	2504707
Tinnitus: A tingling mystery to be decrypted	Nersisson R., Sengupta A., Sarkar S., Agrawal S., Singh P., Josephraj A.N., Thanaraj P., Rajinikanth V.	Electronics and Instrumentation Engineering	Open Neuroimaging Journal	2020	18744400
Role of general adversarial networks in mammogram analysis: A review	Gopal A., Gandhimaruthian L., Ali J.	Information Technology	Current Medical Imaging	2020	15734056
A highly accurate and fast identification of forest fire based on supervised multi model image classification algorithm (SMICA)	Southry S.S., Vinayagapriya S., Khan A.A., Srinivasan P.	Electronics and Communication	Journal of Critical Reviews	2020	23945125

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Adequate improvement for spatial video scaling for video surveillance applications	Ayub Khan A., Srinivasan P., Sree Southry S., Vinayagapriya S.	Electronics and Communication	Journal of Critical Reviews	2020	23945125
Perceptive data heuristic classification algorithm based brain tumor detection for medical applications	Srinivasan P., Ayub Khan A., Sree Southry S., Vinayagapriya S.	Electronics and Communication	Journal of Critical Reviews	2020	23945125
A review on effective removal of emerging contaminants from aquatic systems: Current trends and scope for further research	Rathi B.S., Kumar P.S., Show P.-L.	Chemical Engineering	Journal of Hazardous Materials	2021	3043894
Deep transfer learning-based automated detection of COVID-19 from lung CT scan slices	Ahuja S., Panigrahi B.K., Dey N., Rajinikanth V., Gandhi T.K.	Electronics and Instrumentation Engineering	Applied Intelligence	2021	0924669X
IoT enabled cancer prediction system to enhance the authentication and security using cloud computing	Anuradha M., Jayasankar T., Prakash N.B., Sikkandar M.Y., Hemalakshmi G.R., Bharatiraja C., Britto A.S.F.	Computer Science and Engineering	Microprocessors and Microsystems	2021	1419331
Customized VGG19 Architecture for Pneumonia Detection in Chest X-Rays	Dey N., Zhang Y.-D., Rajinikanth V., Pugalenthi R., Raja N.S.M.	Electronics and Instrumentation Engineering	Pattern Recognition Letters	2021	1678655

An effective separation of toxic arsenic from aquatic environment using electrochemical ion exchange process	Rathi B.S., Kumar P.S., Ponprasath R., Rohan K., Jahnavi N.	Chemical Engineering	Journal of Hazardous Materials	2021	3043894
Process optimization, green chemistry balance and technoeconomic analysis of biodiesel production from castor oil using heterogeneous nanocatalyst	Naveenkumar R., Baskar G.	Biotechnology	Bioresource Technology	2021	9608524
Steady State Mean Square Analysis of Standard Maximum Versoria Criterion Based Adaptive Algorithm	Radhika S., Albu F., Chandrasekar A.	Computer Science and Engineering	IEEE Transactions on Circuits and Systems II: Express Briefs	2021	15497747
Evaluation of brain tumor using brain MRI with modified-moth-flame algorithm and Kapur€™s thresholding: a study	Kadry S., Rajinikanth V., Raja N.S.M., Jude Hemanth D., Hannon N.M.S., Raj A.N.J.	Electronics and Instrumentation Engineering	Evolutionary Intelligence	2021	18645909
Abrasive Water Jet Machining of Al6063/B4C/ZrSiO4 Hybrid Composites: a Study of Machinability and Surface Characterization Analysis	Thamizhvalavan P., Yuvaraj N., Arivazhagan S.	Mechanical Engineering	Silicon	2021	1876990X

Computer aided diagnosis of obesity based on thermal imaging using various convolutional neural networks	U S., Palani Thanaraj K., K S.	Electronics and Instrumentation Engineering	Biomedical Signal Processing and Control	2021	17468094
HPWO-LS-based deep learning approach with S-ROA-optimized optic cup segmentation for fundus image classification	Ramya J., Rajakumar M.P., Uma Maheswari B.	Computer Science and Engineering	Neural Computing and Applications	2021	9410643
Nelder Mead-Based Spider Monkey Optimization for Optimal Power and Channel Allocation in MANET	Jothi S., Chandrasekar A.	Computer Science and Engineering	Journal of Circuits, Systems and Computers	2021	2181266
Hybrid firefly with differential evolution algorithm for multi agent system using clustering based personalization	Anuradha M., Ganesan V., Oliver S., Jayasankar T., Gopi R.	Computer Science and Engineering	Journal of Ambient Intelligence and Humanized Computing	2021	18685137
A compact wide-bandwidth Antipodal Vivaldi Antenna array with suppressed mutual coupling for 5G mm-wave applications	Ramanujam P., Ponnusamy M., Ramanujam K.	Electronics and Communication	AEU - International Journal of Electronics and Communications	2021	14348411
Detecting disorders in retinal images using machine learning techniques	Gnanaselvi J.A., Kalavathy G.M.	Computer Science and Engineering	Journal of Ambient Intelligence and Humanized Computing	2021	18685137

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Slum Extraction from High Resolution Satellite Data using Mathematical Morphology based approach	Prabhu R., Parvathavarthini B., Alagu Raja R.A.	Electronics and Communication	International Journal of Remote Sensing	2021	1431161
Artificial Intelligence and Machine Learning in Emergency Medicine	Tang K.J.W., Ang C.K.E., Constantinides T., Rajinikanth V., Acharya U.R., Cheong K.H.	Electronics and Instrumentation Engineering	Biocybernetics and Biomedical Engineering	2021	2085216
Accurate prediction of heart disease based on bio system using regressive learning based neural network classifier	Oliver A.S., Ganesan K., Yuvaraj S.A., Jayasankar T., Sikkandar M.Y., Prakash N.B.	Computer Science and Engineering	Journal of Ambient Intelligence and Humanized Computing	2021	18685137
Synthesis, Characterization of Ag-SiO2 Nanocomposite and Its Application in Food Packaging	Karthik C., Caroline D.G., Dhanam Priya M., Pandi Prabha S.	Biotechnology	Journal of Inorganic and Organometallic Polymers and Materials	2021	15741443
ERTC: an Enhanced RSSI based Tree Climbing mechanism for well-planned path localization in WSN using the virtual force of Mobile Anchor Node	Thilagavathi P., Manickam J.M.L.	Electronics and Communication	Journal of Ambient Intelligence and Humanized Computing	2021	18685137
A modified inductor and control models of three phase Vienna rectifier topology using particle swarm optimization algorithm	Brindha R., Christy A.A., Elanthirayan R., Krishnamoorthy R.	Electrical and Electronnics	Journal of Ambient Intelligence and Humanized Computing	2021	18685137

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Assessment of electromyograms using genetic algorithm and artificial neural networks	Ambikapathy B., Kirshnamurthy K., Venkatesan R.	Electronics and Instrumentation Engineering	Evolutionary Intelligence	2021	18645909
Melamine-templated TiO2 nanoparticles as anode with high capacity and cycling stability for lithium-ion batteries	Partheeban T., Kesavan T., Jithin A., Dharaneshwar S., Sasidharan M.	Electronics and Communication	Journal of Solid State Electrochemistry	2021	14328488
Neural network and multi-objective optimization of confined flow characteristics on circular cylinder in standing double vortex region	Senthilkumar R., Vasudevan P., Prabhu S.	Electronics and Communication	Neural Computing and Applications	2021	9410643
Production of biodiesel from pork fat using alumina-doped calcium oxide nanocomposite as heterogeneous catalyst	Cherian E., Yazhini D., Victor M., Baskar G.	Biotechnology	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	2021	15567036
Investigation on influence of blending Jatropha biofuel with diesel to improve fuel quality	Manivannan A., Prabu R., Kumar K.M.	Mechanical Engineering	Australian Journal of Mechanical Engineering	2021	14484846
Artificial learning companionusing machine learning and natural language processing	Pugalenthi R., Prabhu Chakkaravarthy A., Ramya J., Babu S., Rasika Krishnan R.	Computer Science and Engineering	International Journal of Speech Technology	2021	13812416

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Realization of novel corona virus kit using silicon based 2D photonic structure via finite difference time domain method	Sethi K.K., Boobhalon V., Sahu S.K., Palai G.		Microsystem Technologies	2021	9467076
Synthesis, spectral, thermal studies and dielectric behavior of functionalized TiO2-loaded diglycidyl epoxy nanocomposite film	Nisha P., Suresh S., Jayamoorthy K., Dhanalekshmi K.I., Ravichandran C.	Science and Humanities	Polymer Bulletin	2021	1700839
Manifold Ambiguity-Free Low Complexity DOA Estimation Method for Unfolded Co-Prime Arrays	Ashok C; Venkateswaran N	Electronics and Communication	IEEE Communications Letters	2021	10897798
Image fusion practice to improve the ischemic-stroke-lesion detection for efficient clinical decision making	Hemanth D.J., Rajinikanth V., Rao V.S., Mishra S., Hannon N.M.S., Vijayarajan R., Arunmozhi S.	Electronics and Instrumentation Engineering	Evolutionary Intelligence	2021	18645909
Energy efficient momento based dynamic scheduling for lifetime maximization in WSN	Brindha G., Ezhilarasi P.	Electronics and Communication	Journal of Ambient Intelligence and Humanized Computing	2021	18685137
Model-predictive control-based hybrid optimized load frequency control of multi-area power systems	Mahendran M.V., Vijayan V.	Electronics and Instrumentation Engineering	IET Generation, Transmission and Distribution	2021	17518687

Enhanced QoS Through Optimized Architecture for Video Streaming Applications in Heterogeneous Networks	Duraimurugan S., Avudaiammal R., Vincent P.M.D.R.	Information Technology	Wireless Personal Communications	2021	9296212
Optimization and technoeconomic analysis of biooil extraction from Calophyllum inophyllum L. seeds by ultrasonic assisted solvent oil extraction	Rajendran N., Gurunathan B., I. A.E.S.	Biotechnology	Industrial Crops and Products	2021	9266690
Fuzzy Logic-based Battery Management System for Solar-Powered Li-Ion Battery in Electric Vehicle Applications	Raj P.J., Prabhu V.V., Premkumar K.	Electrical and Electronnics	Journal of Circuits, Systems and Computers	2021	2181266
Greener synthesis and characterization of cadmium-tellurium quantum dots using aqueous extract of waste orange peel	Mahalakhsmi A., Baskar G.	Biotechnology	Indian Journal of Biochemistry and Biophysics	2021	3011208
Multi-Objective Optimization with Fuzzy Logic Analysis of Confined Flow Characteristics on Circular Cylinder	kumar R.S., Prabhu S., Vasudevan P.	Electronics and Communication	Journal of The Institution of Engineers (India): Series C	2021	22500545

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Performance of Contaminated Soil Blended with Sodium Silicate	Adlin Rose R., Preethi Jain B., Ramya D., Nilaa M.	Science and Humanities	Silicon	2021	1876990X
Influence of near-dry ambiance on WEDM of Monel superalloy	Kumar N.E.A., Babu A.S., Sathishkumar N., Pradeep Kumar C.	Information Technology	Materials and Manufacturing Processes	2021	10426914
Simultaneous Reconfiguration and Optimal Capacitor Placement Using Adaptive Whale Optimization Algorithm for Radial Distribution System	Babu M.R., Kumar C.V., Anitha S.	Electrical and Electronnics	Journal of Electrical Engineering and Technology	2021	19750102
Design of low profile co-axial fed high gain stacked patch antenna for Wi-Fi/WLAN/Wi-Max applications	Pachaiyappan G., Ramanujam P.	Electronics and Communication	Frequenz	2021	161136
A genetic algorithm based approach to estimate the volume of a drinking water reservoir in Chennai city, South India, using multi-spectral satellite images	Heltin Genitha C., Indhumathi M., Sanjeevi S.	Information Technology	Geocarto International	2021	10106049

Research projects received :

Name of the Project/ Endowments, Chairs	Name of the Principal Investigator/Co-investivator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency	Type (Government/non-Government)
Unnat Bharat Abhiyan (UBA)	**Dr.V.Muthulakshmi**	**Information Technology**	**2018**	**5,00,000**	**3 years**	Science & Technology, Government of Tamil Nadu	Government
Skill and Personality Development Programme Centre for Sc/ST Students	**Dr.V.Muthulakshmi**	**Information Technology**	**2018**	**9,39,000**	**3 Years**	AICTE, New Delhi	Government
Carbon Quantum Dots From Microalgae for Organic Dyes Degradation In Industrial Water – A Novel Approach.	Dr.M.Chamundeeswari	Biotechnology	2019	29,30,600	2 Years	Department of Science and Technology, Govt. of India	Government
Modernization of Analytical Techniques in Biotechnology Laboratory.	Dr. G.Sreekumar Dr. C. Karthik	Biotechnology	2020	12,00,000	1 Year	MODROB'S - AICTE, New Delhi	Government
Advanced Intelligence Big Data Analytics	Dr. A. Chandrasekar	Computer Science and Engineering	2020	10,45,490	1 Year	MODROB'S - AICTE, New Delhi	Government

Laboratory in Cyber Security.							
Development of multi-spectral (Termal/Visible) Imaginh system for Fever screening in Crowded places for Detection of Infectious Diseases.	Dr.M.Palani Thankaraj Dr.Parvathavarthini	Electronics and Instrumentation Engg. &Computer Science and Engg.	2020	11,61,629	2 Years	Science & Engineering Research Board (SERB), Department of Science and Technology	Government
Managing the psychological wellbeing of remote working employees during Covid pandemic.	Dr. Jayasree krishnan Dr. U. Abirami	MBA	2020	3,25,000	6 Months	ICSSR, New Delhi	Government
Climate change and its effect on agricultural pattern and lifestyle of farmers in the selected Agro climatic zones of Karnataka-suggest measure for a policy framework.	Dr. D. Joel Jebadurai	MBA	2020	6,60,000	2 Years	ICSSR, New Delhi	Government

Solar energy utility using energy efficient novel converter to provide supply to described load	Dr. Jayarama PradeepDr. V. Krishnakumar,Dr. P. Anbarasan	Electrical and Electronics Engineering	2020	20,000	1 Year	TIAS Energy	Non-Government
National Hydrology Project (Government of India under Ministry of Jai Shakti) Roorkee, India	Dr.HeltinGenitha	Intormation Technology	2020	75,000	1 Year	National Hydrology Project (Government of India under Ministry of Jai Shakti) Roorkee, India	Government
Penetration testing on web apps	Dr.Lilly Raamesh Dr.Duraimurugan S	Information Technology	2020	25,000	1 year	Affluent Consulting Pvt Ltd,	Non-Government
Providing and fixing of air conditioners at various locations in NIOT campus (Phase II)	Dr.S.Arivazhagan	Mechanical Engineering	2020	36,000	1 Year	Gemini Cooling System	Non-Government
Smart attendance and public announcement system with open CV technology	Dr. C.N.Gnanaprakasam Dr.G.Brindha	Electronics and Instrumentation Engineering	2020	2,05,000	1 Year	M/s Gemicates Technologies	Non-Government
Advanced face recognition system using Python	Dr B. Senthilkumar Mr R.Elavarasan	Electronics and Instrumentation Engineering	2020	2,07,000	1 Year	M/s Gemicates Technologies	Non-Government