P.S.R. ENGINEERING COLLEGE

An Autonomous Institution & Affiliated to Anna University, Chennai, Accredited NAAC, NBA &
RecognizedUnder 12(B)of the UGC Act,1956, Sivakasi-626140.Virudhu Nagar District, Tamil Nadu.

NEWS LETTER

December 2021 – May 2022

Department of Electronics and Communication Engineering

Chief Editor
Dr.K.Valarmathi
Prof & Head ECE

Editor's Message

"Science can amuse and fascinate us all, but it is engineering that changes the world. Scientists study the world as it is; engineers create the world that has never been."

Facuty Edotors: *Student Editors:*
Ms.B.Dhanam AP/ECE   *B.Sathishkumar ECE*

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INSTITUTION VISION

To contribute to the society through excellence in technical education with societal values and thus a valuable resource for industry and humanity.

INSTITUTION MISSION

- To create an ambience for quality learning experience by providing sustained care and facilities.
- To offer higher level training encompassing both theory and practices with human and social values.
- To provide knowledge-based services and professional skills to adapt tomorrow's technology and embedded global changes.

DEPARTMENT VISION

The vision of the Electronics and Communication Engineering Department is to produce graduates with sound knowledge for the betterment of society and to meet the dynamic demands of industry andresearch.

DEPARTMENT MISSION

- Offering under graduate and post graduate programs by providing effective and balanced curriculum and equip themselves to gear up to theethical challenges awaiting them.
- Providing the technical, research and intellectual resources that will enable the students to have a successful career in the field of electronicsand communication engineering.
- Providing need based training and professional skills to satisfy the needsof society and industry.

PROGRAMME OUTCOMES (POs)

- *PO: 1***Engineering Knowledge***: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.*
- *PO: 2* **Problem Analysis***: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, naturalsciences, and engineering sciences.*
- *PO: 3* **Design / Development of Solutions***: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.*
- *PO: 4* **Conduct Investigations of Complex** *Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.*
- *PO:5* **Modern Tool Usage:** *Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.*
- *PO:6* **The Engineer and Society:** *Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.*
- *PO: 7* **Environment and Sustainability:** *Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.*
- *PO: 8* **Ethics:** *Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.*
- *PO: 9* **Individual and Team Work:** *Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.*
- *PO: 10* **Communication:** *Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.*
- *PO: 11* **Project Management and Finance:** *Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader ina team, to manage projects and in multidisciplinary environments.*
- *PO: 12* **Life-long Learning:** *Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.*

PROGRAMME SPECIFIC OUTCOMES (PSOs)

- *PSO:1 Design, simulate and analyse diverse* problems in the field of telecommunication.
- PSO:2 Able to design and analyse varied electronic circuits for applications.
- PSO:3 Apply signal and image processing techniques to analyse a system for applications.
- PSO:4 Construct, test and evaluate an embedded system and control systems with real time constraints.

DEPARTMENT ACTIVITIES

List of funded projects:

Name Of The Faculty	Title	Amount	Funding Agency	Order No & Date	Status
Dr.K.Valarmathi	RF Mixed Antenna Design LAB	Rs. 19,68,100	AICTE-MODROBS	F.No. 9-24/IDC/ MODROB-REG /Policy - 1/2021 -22 & 14.01.2022	Ongoing
Dr.K.Valarmathi	Night Vision Patrolling Robot using Arduino	Rs.7,500	TNSCST	Lr.No.TNSCST/ SPS/2021-2022/ & 11.03.2022	Completed

List of Candidates pursuing Ph.D. Under Department Supervisor:

Name of the candidate	Reg. No.	Supervisor Name	University Registered	Area of Research	Status
Mr.S.Balasubramanian P.S.R Engineering College, Sivakasi	1314489148	Dr.P.Marichamy	Anna University, Chennai	Medical Data Mining	Synopsis Submitted
Ms.M.Swarnasudha Ramco Institute of Technology, Rajapalayam	17234891501	Dr.K.Valarmathi	Anna University, Chennai	Data Analytics	Synopsis Submitted
Mr.P.Ravikumaran Fatima Michael College of Engineering & Technology, Madurai	1514489952	Dr.K.Valarmathi	Anna University, Chennai	Computer Networks	Synopsis Submitted
Mr.R.Raj Kumar SVS College of Engineering, Coimbatore	1414489833	Dr.P.Marichamy	Anna University, Chennai	Indigestible Antenna	Provisional Registration Confirmed
Ms.B.Dhanam P.S.R Engineering College, Sivakasi	18244891514	Dr.P.Marichamy	Anna University, Chennai	VLSI Design	Provisional Registration Confirmed

Mr.P.Dinesh Kumar VSB Engineering College, Karur	1614489383	Dr.K.Valarmathi	Anna University, Chennai	Artificial Intelligence, Wireless Sensor Networks	Provisional Registration Confirmed
Mr.S.Jeevitha Kalasalingam Institute of Technology, Srivilliputhur	16244897309	Dr.K.Valarmathi	Anna University, Chennai	Biomedical and Image Processing	Provisional Registration Confirmed
Mr.S.Karthikeyan M.Kumarasamy College of Engineering, Karur	1414489829	Dr.K.Valarmathi	Anna University, Chennai	Industrial Automation and Wireless Sensor Network	Provisional Registration Confirmed
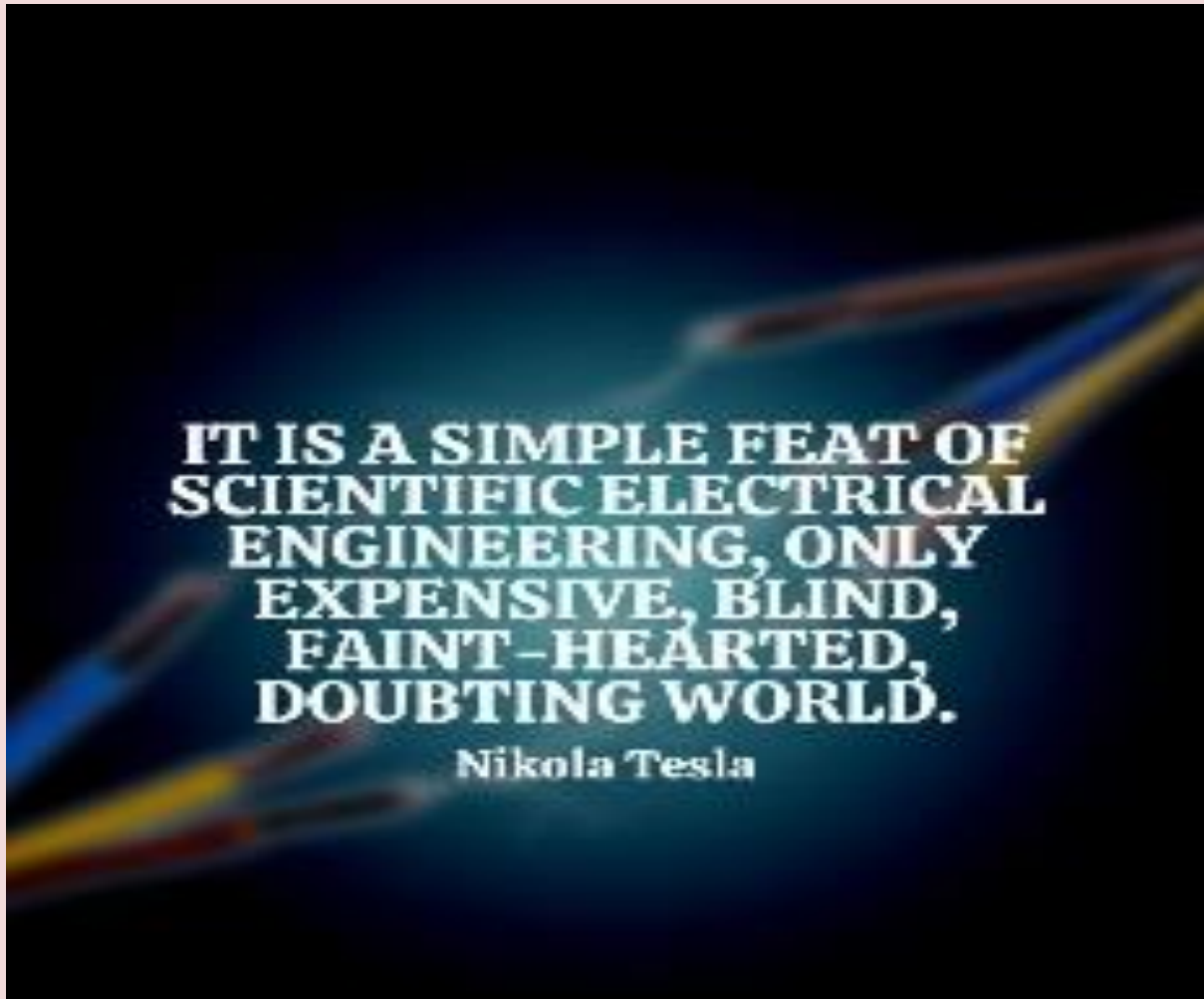
Ms.K.Meenalakshmi P.S.R Engineering College, Sivakasi	20234891205	Dr.K.Valarmathi	Anna University, Chennai	Biomedical and Image Processing	Provisional Registration Confirmed
Mr.N.S.Yoga Ananth P.S.R Engineering College, Sivakasi	20241496	Dr.P.Karuppasamy	Anna University, Chennai	Antennas	Course Work Completed
Mr.P.Govindamoorthi PSN Engineering College, Tirunelveli	18124897276	Dr.P.Ranjith Kumar	Anna University, Chennai	Health Care	Provisional Registration Confirmed
Ms.M.Vimala P.S.R. Engineering College, Sivakasi	18244897235	Dr.P.Ranjith Kumar	Anna University, Chennai	Medical Image Processing	Provisional Registration Confirmed
Ms.V.Srirenga Nachiyar, Ramco Institute of Technology, Rajapalayam	20241136	Dr.P.Marichamy	Anna University, Chennai	Medical Signal Processing	Course Work Completed
Ms.S.Manjula, Ramco Institute of Technology Rajapalayam	20241380	Dr.K.Valarmathi	Anna University, Chennai	Cloud Computing, Wireless Sensor Networks	Course Work Completed
Mr.G.Sivakumar Ramco Institute of Technology, Rajapalayam	20241385	Dr.P.Marichamy	Anna University, Chennai	Mobile Adhoc Networks	Course Work Completed
Ms.S.Kalaivani Government Polytechnic College, Coimbatore	21244897364	Dr.P.Marichamy	Anna University, Chennai	Nano Sensors	Course work
Mr.D.Gopinath Ramco Institute of Technology, Rajapalayam	21144897460	Dr.P.Marichamy	Anna University, Chennai	Non-Invasive Antennas	Course work
Ms.P.Lingeswari P.S.R Engineering College, Sivakasi	20241982	Dr.P.Marichamy	Anna University, Chennai	Wireless Communication	Course Work

Ms.P.A.Mathina P.S.R Engineering College, Sivakasi	22284891122	Dr.K.Valarmathi	Anna University, Chennai	Networks	Course Work

FDP/STTP/Workshop Conducted:

The Department of ECE and Institution of Electronics And Telecommunication Engineers Students' Forum (ISF) of PSR Engineering College have conducted workshop on **"Design Thinking"** during 24.03.2022 and 25.03.2022 to the II year ECE students.
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In this workshop, the resource person Dr.R.Meena Prakash explained the steps of Design Thinking – Empathy, Define, Ideate, Prototype and Test. She also explained the practical applications of Design Thinking using Internet of Things Technology. The students, using the knowledge gained, practically designed solutions for few problem statements. Around 120 students participated in this workshop and

got benefited

Institution Of Electronics And Telecommunication Engineers Students' Forum (ISF) of PSR Engineering College have conducted one day seminar on **Industry 4.0** on 08.03.2022 for the registered ECE students to enhance their technical knowledge in Atomized Industries.

The Electronics and Communication Engineering department   Institution of Electronics and Telecommunication Engineers Students' Forum (ISF) of PSR Engineering College have conducted a Hands on session

15th March 2022 at 9.30am for the ECE students. Students have information about opportunities in current software industry with massive automation projects running across different sectors.
In this webinar, Students learned about

- SDR Concepts
- Components in SDR system
- Types of SDR
- Requirements of SDR Set Up
- SDR Softwares
- Advantages and Disadvantages of SDR
- Applications of SDR
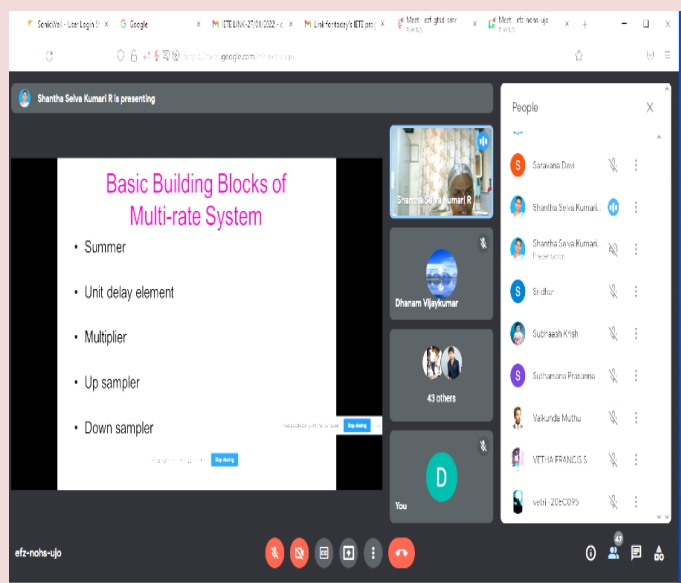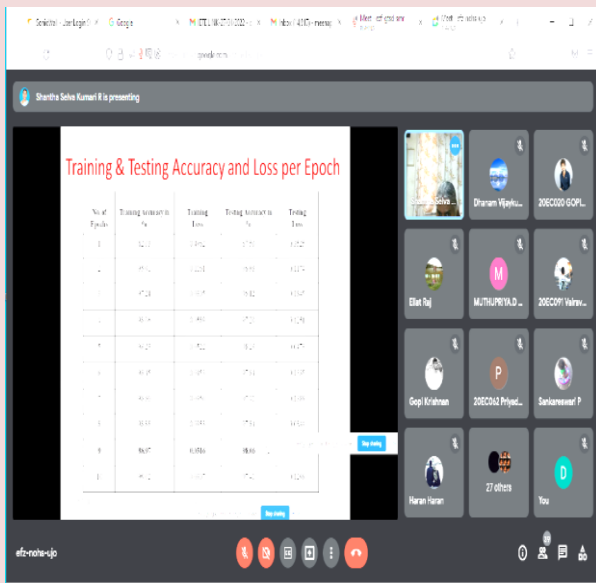
The Department of ECE and Institution of Electronics And Telecommunication Engineers Students' Forum (ISF) of PSR Engineering College have conducted webinar on **"Trends in Signal Processing"** on 27.01.2022 to the ECE students for enhancing their technical knowledge in the domain of Signal Processing.

In this webinar, the resource person Dr.R.Shantha Selva Kumari explained the concepts of Digital Signal Processing and Applications. She also explained the concepts of transforms techniques in Signal Processing. She gave an introduction to the Convolutional Neural Network, deep learning and image classification with deep learning. Around 120 students participated in this webinar and got benefited.

FACULTY CORNER

Patent Publications:

S.No.	Name of the Inventors	Title of the patents	Patent Number	Published Date
1	Dr.P.Marichamy Dr.P.Karuppasamy Dr.K.Valarmathi Dr.S.Murugan Dr.R.Meena Prakash Dr.R.Renugadevi Dr.P.Suresh Pandiarajan Mrs.K.Ramalakshmi Mr.S.Sankar Ganesh Mr.S.Santhosh Mr.M.Petchi Muthu Mr.V.Prem Kumar	Smart Food Environment Monitoring System	202241022943 A	06.05.2022
2	Dr.P.Marichamy Dr.P.Ranjith Kumar Dr.K.Valarmathi Dr.G.Karthikeyan Mr.G.Lingasamy Ms.M.Vimala Ms.P.Krishnaleela Ms.P.Lingeswari Ms.K.Ramalakshmi Mr.N.S.Yoga Ananth Mr.S.Athimoolam Mr.S.Balasubramanian Mr.K.Palanimurugan Mr.V.Vinoth	Optimal ANN Based Approach for Computer Aided Diagnosis of Kidney Stone	202241022952 A	06.05.2022
3	Dr.P.Marichamy Dr.K.Valarmathi Dr.R.Vinoth Dr.S.Manikandan Dr.R.Meena Prakash Dr.R.Renugadevi Dr.G.Karthikeyan Mr.S.Balasubramanian Ms.K.Ramalakshmi Ms.P.A.Mathina Ms.B.Dhanam Mr.P.Srinivas Mr.M.Vairamuthu Mr.R.Vijay Prakash	Self Balancing Robot for Object Carrying in Transport Application	202241022941 A	06.05.2022

Book /Book Chapter Published:

1. Amogha G.paladhi, Sugumari Vallinayagam, Sairekha Rajendran, Vinoth rathinam, Vipinkumar Sharma (2022) "Microbes and Microbial Biotechnology for Green Remediation - Microalgae: a promising tool for plastic degradation", Elsevier, ISBN: 978-032-39-0453-7

2. Sankar Ganesh S, Rajaprakash S(2022), "Intelligent Technologies and Robotics- Study and Comparision of "MIMO-OFDM" Under Acoustic Communication Systems, Springer, ISBN: 978-981-16-7656-7

3. Sankar Ganesh S, Rajaprakash S(2022), " Sustainable Communication Networks and Application- High-Speed Antenna Selection for Underwater Cognitive Radio Wireless Sensor Networks., Springer, ISBN: 978-981-16-6604-9

4. K.Ramalakshmi, R.Meena Prakash, (2021), Cyber Attacks – Cyber Security, Shanlax Publisher. pp.21-26. ISBN No.978-93-91373-16-0.

5. Shalini Ramesh, Sugumari Vallinayagam, Karthikeyan Rajendran, Sasireka Rajendran, Vinoth Rathinam, Sneka Ramesh, (2021), Computer-Aided Drug Designing – Modality of Diagnostic System, Biomedical Signal Processing for Healthcare Applications. Routledge & CRC Press – Taylor & Francis Group. ISBN: 9781003147817. https://doi.org/10.1201/9781003147817.

6. Sankar Ganesh, S., Rajaprakash, S, "High-Speed Antenna Selection for Underwater Cognitive Radio Wireless Sensor Networks". In: Karrupusamy, P., Balas, V.E., Shi, Y. (eds) Sustainable Communication Networks and Application. Lecture Notes on Data Engineering and Communications Technologies Springer, Singapore, Vol. No.93. pp.749-755. Jan 2022. https://doi.org/10.1007/978-981-16-6605-6_56.

7. K. Shantha Shalini, S. Leelavathy, Kishore Pani, M. P. Dinakar, R. Guruprassath & Sankarganesh, (2022), Applying the RPBK22 Technique for Secure the Generalized Data. In: Karrupusamy, P., Balas, V.E., Shi, Y. (eds) Sustainable Communication Networks and Application. Lecture Notes on Data Engineering and Communications Technologies, vol 93. Springer, Singapore. https://doi.org/10.1007/978-981-16-6605-6_62.

8. Sasireka R., Vinoth R., Sugumari V., Sharma V.K. (2022) Nano Biomaterials for Tissue Engineering Applications—Short Review. In: Bindhu V., R. S. Tavares J.M., Ţălu Ş. (eds) Proceedings of Fourth International Conference on Inventive Material Science Applications. Advances in Sustainability Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-16-4321-7_12.

9. Sasireka Rajendran, Anu Pandita, Vinoth Rathinam, Sugumari Vallinayagam, Deepu Pandita, and Madheswaran Muthusamy, (2022), "Cinnamomum zeylanicum: Nature's Wonder Plant with Antidiabetic Prominence", Antidiabetic Plants for Drug Discovery Pharmacology, Secondary Metabolite Profiling, and Ingredients with Insulin Mimetic Activity.

10. Amogha G Paladhi, Sugumari Vallinayagam, Sasireka Rajendran, Vinoth Rathinam, Vipin Kumar Sharma, (2022), "Chapter 30 – Microalgae: a promising tool for plastic degradation", Microbes and Microbial Biotechnology for Green Remediation (Elsevier), pp. 575-587. https://doi.org/10.1016/B978-0-323-90452-0.00049-9.

11. S. Karthikeyan, K. Vimala Devi, K. Valarmathi, (2021), Intelligent Fog Computing for Industrial Wireless Sensor Networks, Industry 4.0 Interoperability, Analytics, Security, and Case Studies. CRC Press. ISBN: 9781003048855. https://doi.org/10.1201/9781003048855.

12. Kusuma Kumari E., Sharma P.K., Murugan S., Rama Devi D. (2021) A Compact Multiband CPW Feed Microstrip Fractal Antenna for X-Band and Ku-Band Satellite Communication Applications. In: Kumar S., Purohit S.D., Hiranwal S., Prasad M. (eds) Proceedings of International Conference

on Communication and Computational Technologies. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-3246-4_74.

13. Dr.G.Karthikeyan, Dr.R.Vinoth, S.Sankar Ganesh and S.Athimoolam, (2022), Efficiency Of Solar PV Enhanced by using Phase Change Material (PCM), Futuristic Trends in Network & Communication Technologies, ISBN: 978-81-959356-1-1, IIP Proceedings, Volume 2, Book 19, Part 2.

14. Dr. K. Valarmathi, S.Sasireka, T. Rengaraj, K.Ramalakshmi, (2022), Enhancement the Fresh Water Harvesting from Hybrid PV/T Solar Still Techniques, Futuristic Trends in Network & Communication Technologies, ISBN: 978-81-959356-1-1, IIP Proceedings, Volume 2, Book 19, Part 2.

15. Rama, P., Murugan, S. (2022). Localization in Underground Area Using Wireless Sensor Networks with Machine Learning. In: Sanyal, G., Travieso-González, C.M., Awasthi, S., Pinto, C.M., Purushothama, B.R. (eds) International Conference on Artificial Intelligence and Sustainable Engineering. Lecture Notes in Electrical Engineering, vol 837. Springer, Singapore. https://doi.org/10.1007/978-981-16-8546-0_4.

Journal Publications

Title of the Paper	Name of the author/s	Name of journal	Year of publication	ISSN number
A Likelihood Swarm Whale optimization based LeNet Classifier approach for the Prediction and Diagnosis of patients with Atherosclerosis disease	P Govindamoorthi **P Ranjith Kumar**	Computer Methods in Biomechanics and Biomedical Engineering	2022	1025-5842
Browser Selection for Android Smartphones Using Novel Fuzzy Hybrid Multi Criteria Decision Making Technique	Ramathilagam Arunagiri Pitchipoo Pandian **Valarmathi Krishnasamy** Rajakarunakaran Sivaprakasam	Information Technology and Control	2022	1392-124X
Fuzzy based hybrid BAT and firefly algorithm for optimal path selection and security in wireless sensor network	P Dinesh Kumar **K Valarmathi**	Automatika – Journal for Control, Measurement, Electronics, Computing and Communications	2022	0005-1144

Title	Authors	Journal	Year	ISSN
Optimized Channel Decision and Secure Data Transmission for Health Monitoring Using Wireless Body Area Network through Cognitive Controller	R Rajaguru K.Vimala Devi **P.Marichamy**	Wireless Personal Communications	2022	0929-6212
Ultrasound Kidney Images with I-KNN Dependent FPGA Abnormality Classification	**R. Vinoth** R. Sasireka	Journal of Circuits, Systems and Computers	2022	0218-1266
Split ring resonator based Dual frequency Microstrip patch antenna for wireless applications	S.Murugan E.Kusuma Kumari	Journal of Microwave Engineering and Technologies	2022	2349-9001
Anomaly Detection in Social Media Texts Using Optimal Convolutional Neural Network	Swarna Sudha M **Valarmathi K**	Intelligent Automation & Soft Computing	2022	1079-8587
Investigational study on improving the yield from hybrid PV/T modified conventional solar still with enhanced evaporation and condensation technique – An experimental approach	Karthikeyan Ganesan David Prince Winston Sathyamurthy Ravishankar Suresh Muthusamy	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	2022	1556-7036
Kidney Stone Detection Using Hybrid Butterfly Net and Inception net Model	R.Buvaneswari **R.Vinoth**	ESP Journal of Engineering & Technology Advancements	2022	2583-2646
A Novel Deep Learning Framework for Pulmonary Embolism Detection for Covid-19 Management	S Jeevitha **K Valarmathi**	Intelligent Automation and Soft Computing	2022	1079-8587
Approximation of Water Footprint Meter	P. Karuppasamy S. Mahalakshmi S. Santhosh	International Research Journal of Modernization in Engineering, Technology and Science	2022	2582-5208

Classification of brain tumours from MR images with an enhanced deep learning approach using densely connected convolutional network	R Meena Prakash R Shantha Selva Kumari K Valarmathi K Ramalakshmi	Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization	2022	2168-1163
Compound Keyword Level Search to conserve Privacy in access of Encrypted Cloud	G. Karthikeyan R. Sankarganesh P. Karuppasamy	International Journal of Advanced Research in Science, Communication and Technology	2022	2581-9429
Low Power Intrusion Detection Using Multi-Level Sensor Authentication	S. Mahalakshmi S Santhosh P Karuppasamy	International Journal of Advanced Research in Science, Communication and Technology	2022	2581-9429
Novel Brain Tumor Classification Model with MLPNN using UNET	M Vimala P Ranjith Kumar	Journal of Circuits, Systems and Computers	2022	0218-1266
Programmable implementation of time-area-efficient Elliptic Curve Cryptography for entity authentication	Kamaraj Arunachalam **Marichamy Perumalsamy**	Inf. Midem-J. Microelectron. Electron. Compon. Mater	2022	0352-9045
Spectrum selection and decision using neural and fuzzy optimization approaches	R. Raja Guru K. Vimala Devi **P. Marichamy**	Wireless Networks	2022	1022-0038
An ultra-thin flexible four port MIMO antenna for WBAN communications	Rajkumar Ramanujam **Marichamy Perumalsamy**	Microwave and Optical Technology Letters	2022	0895-2477
Design of Logically Obfuscated Memory and Arithmetic Logic Unit for Improved Hardware Security	Usharani M Sakthivel B Jayaram K **Renugadevi R**	Intelligent Automation and Soft Computing	2022	1079-8587
An Improved Kidney Tumor Prediction Using Deep Convolutional Neural Network-Restricted Boltzmann Machine Technique in Medical Image Segmentation	P. Ravikumaran K. Vimala Devi **K. Valarmathi**	Journal of Medical Imaging and Health Informatics	2021	2156-7018

Gustatory stimulus-based electroencephalogram signal classification	Marichamy Perumalsamy Kalyana Sundaram Chandran	International Journal of Biomedical Engineering and Technology	2021	2666-1462
Proof Carrying Approximate Circuits using Physical Unclonable Function	Divya K Marichamy P	International Journal of Science & Engineering Development Research	2021	2455-2631
Wide Band Meandered-Loop Ground Radiation Antenna for Biomedical Applications	R. Rajkumar **P. Marichamy**	Journal of Medical Imaging and Health Informatics	2021	2156-7018
Analysis of Water Body Segmentation from Landsat Imagery using Deep Neural Network	S Thayammal R Jayaraghavi S Priyadarsini D Selvathi	Wireless Personal Communications	2021	0929-6212
Design and fabrication of compact triangular multiband microstrip patch antenna for C- and X-band applications	Balamurugan Chinnagurusamy **Marichamy Perumalsamy** Arun Samuel Thankamony Sarasam	International Journal of Communication Systems	2021	1074-5351
A Novel Fuzzy Corner Approach for Brain Tumor Segmentation and Classification	Lakshmi K Balasubramanian S Marichamy P	International Journal of Creative Research Thoughts	2021	2320-2882
GA based Adaptive Learning Algorithm for IPv4 Packet Classification	Indira Bharathi **Valarmathi Krishnasamy** Veeramani Sonai	Design Engineering	2021	0011-9342
An Effective Ring Partition And Half toning Combined Face Morphing Detection	V Muthuvel Vijai P A Mathina	International Journal of Computer & Organization Trends	2021	2249-2593
An IoT-based system for effective COVID patient health monitoring with SVM decision making	R Renugadevi J Prakash B Sakthivel A Y Raj	Turkish Journal of Physiotherapy and Rehabilitation	2021	3649-3653
Multiband microstrip patch antenna using copper nano radiating element for X band and C band applications	C Balamurugan **P Marichamy**	International Journal of Numerical Modelling: Electronic Networks Devices and Fields	2021	0894-3370

Multi-Port Memory Design in Quantum Cellular Automata Using Logical Crossing	A Kamaraj **P Marichamy** R Abirami	Journal of Microelectronics, Electronic Components and Materials	2021	0352-9045
Performance Comparison of Microstrip Patch Antenna Using h-BN Nanoceramic Substrate and FR4 Substrate	C Balamurugan **P Marichamy** R Harichandran	Wireless Personal Communications	2021	0929-6212
An Advanced Compressive Channel Estimation with Phase Noise in Massive MIMO systems	Nithyakalyani M Mathina P A	International Journal of P2P Network Trends and Technology	2021	2249-2615

International/National Conference Publications:

Name of the Author	Title	Name of the Conference	Date
M. Swarna Sudha K.Valarmathi	Location Prediction using Machine Learning	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
R.Meena Prakash S.Thayammal R.SanthaSelvakumari M.Dhushima	Crop disease Detection and Classification with Transfer learning and hyper-parameters optimized Convolutional neural network	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
P.Karuppasamy S.Santhosh S.Athimoolam	An Efficient Model, Design and Analysis of Binary Address using QCA	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
K. Valarmathi V. Vijayalakshmi	Implementation of Raspberry pi based women safety system	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
M.Vimala P. Ranjith Kumar	A survey of Brain Tumor Segmentation using Deep Neural Network	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Anusankari K.Lakshmi S.Murugalakshmi	Patrolling for Night Vision using Arduino	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Anusankari K.Lakshmi S.Murugalakshmi	Tiling Based Concurrent Supervision of Power and Fault Tolerance in Heterogenous Multicore Embedded Systems	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22

K.Lakshmi K.Jeyaprakash S.Anusankari	Novel Smart Irrigation System in Agriculture using Solar and Sensors	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
Sasireka Rajendran **Vinoth Rathinam** Akilandaeswari Jeyaraj VishwaShree Meera. V.R.N	Preliminary Phytochemical Screening And Evaluation of Antioxidant Property In Different Parts of Borreria Hispida	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Manjula **K.Valarmathi**	Deep Learning Algorithm for Detecting Cyber Attacks	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
A.Malathi **R.Vinoth**	Design and implementation of full adder and half adder using 45nm technology	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
G.Premalatha **R.Vinoth**	Design and Modified U-net based retinal vessel segmentation - deep learning approach	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
P.RanjithKumar M.Vimala Premakarthika	COVID Diagnosis System by Joint Segmentation and Classification	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
P.Marichamy Dhanalakshmi Padmapriya	Air Pollution Monitoring by Image Classification and Segmentation	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
K.Valarmathi M.Nandhini	Screening of Depression using Electroencephalogram based on Convolutional Neural Networks	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Athimoolam S Narmadha R.Suguna	Smart Incubator for Premature Baby in an IOT Application	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
N.Krishnapriya S.SankarGanesh P.Lingasamy	Whale Optimization-Based On Clustering Protocol for Vehicular Cognitive Radio Networks	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Subapriyadarsini S.Balasubramanian S.Murugalakshmi	ARIMA And LSTM Based Risk Prediction of Crime Data	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
T.Senthil Arasi K.Valarmathi V.Vijayalakshmi	An Improved LSTM Based Framework For COVID-19 Risk Prediction	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22

S.Jasmine P.Marichamy S.Balasubramanian	An Effective Deep Learning Based Accurate Gait Detection Using MobileNet	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Sureka Nithila Princy R.Vinoth M.Rajkumari	Stock Price Prediction Based on Hybrid Classifier using Artificial Neural Network and Decision Tree Model for Higher Accuracy	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Jeeva Paulin P.Ranjith kumar P.Krishna Leela	Design of Textile Antenna using Jean Fabric	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
A.Vanitha R.Renugadevi K.Lakshmi	BlockChain Based Secure and Energy Efficient Routing Protocol for Wireless Sensor Network	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
R. Buvaneswari R.Vinoth S.Manikandan	An Improved Butterfly-Net Based Detection of Stones in Kidney Images	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
P. Suganya **P.A.Mathina** **P.Suresh Pandiarajan**	An effective neural network based on clustering protocol for IoT enabled sensor network	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
R.Renugadevi S.Rajeshshree **S.Mahalakshmi**	Efficient data communication in underwater sensor network based on hybrid low energy adaptive cluster head selection algorithm	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
M. Meenalakshmi	Effective Classification of Emotion Detection System using AI Algorithms	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
M.Gomathi K.Valarmathi M.Nandhini	Design and Analysis of F-OFDM in 5G Network	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
N.S.Yoga Ananth P.Karuppasamy	Landside Monitoring Drone with Multiple Applications	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
M.Nagaraj P.Karuppasamy	Sentiment Analysis With Convolutional Neural Networks	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
K.Pavithra K.Ramalakshmi	Liver Tumor Segmentation Using Deep Resunet	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22

S.Murugan	Review of Microwave Imaging Technique For Medical Applications	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
K P Yogalakshmi R.Renugadevi P.Suresh Pandiarajan	Energy-Efficient Cooperative Spectrum Sensing Scheme Based on D-M Theory for Cognitive Vanet Network	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
S.Manikandan G.Rajeswari V.Sathyasree M.Subahshini	Smart Blind stick with Voice	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
B.Bromio Benedict P.Karuppasamy	Automatic Segmentation of CT images with Deep Convolutional Neural network and multilayer perceptron	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22
B.Dhanam	Stack Based Configurable Logic Gates Technology for Hardware Security	International Conference on Recent Innovation in Science and Engineering (ICRISE)	Feb-22

International \National Conference Publications::

1. Suresh Subramanian, B Sundarambal, A Amir Antone Jone, **K Saravanan,** B Karthikeyan, "Design of Abreast Rectangular Shape Dielectric Resonator Antenna for WLAN Applications", presented in the 6th International Conference on Devices, Circuits and Systems (ICDCS 2022), held at Karunya Institute of Technology and Sciences, Coimbatore on Apr. 21 – 22, 2022. 1109/ICDCS54290.2022.9780752.

2. Swarna Sudha, K.Valarmathi, (2022), Location Prediction using Machine Learning, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.12.

3. Karuppasamy, S.Santhosh, S.Athimoolam, (2022), An Efficient Model, Design and Analysis of Binary Address using QCA, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.15.

4. Valarmathi, V. Vijayalakshmi, (2022), Implementation of Raspberry pi based women safety system, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.17.

5. Vimala, P. Ranjith Kumar, (2022), A survey of Brain Tumor Segmentation using Deep Neural Network, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.18.

6. Anusankari, K.Lakshmi, S.Murugalakshmi, (2022), Patrolling for Night Vision using Arduino, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.19.

7. Anusankari, K.Lakshmi, S.Murugalakshmi, (2022), Tiling Based Concurrent Supervision of Power and Fault Tolerance in Heterogenous Multicore Embedded Systems, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.20.

8. Lakshmi, K.Jeyaprakash, S.Anusankari, (2022), Novel Smart Irrigation System in Agriculture using Solar and Sensors, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.22.

9. Sasireka Rajendran, Vinoth Rathinam, Akilandaeswari Jeyaraj, VishwaShree Meera. V.R.N, (2022), Preliminary Phytochemical Screening And Evaluation of Antioxidant Property In Different Parts of Borreria Hispida, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.24.

10. Manjula, K.Valarmathi, (2022), Deep Learning Algorithm for Detecting Cyber Attacks, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.25.

11. Malathi, R.Vinoth, (2022), Design and implementation of full adder and half adder using 45nm technology, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.41.

12. Premalatha, R.Vinoth, (2022), Design and Modified U-net based retinal vessel segmentation -deep learning approach, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.42.

13. RanjithKumar. M.Vimala, Premakarthika, (2022), COVID Diagnosis System by Joint Segmentation and Classification, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.43

14. Marichamy, Dhanalakshmi, Padmapriya, (2022), Air Pollution Monitoring by Image Classification and Segmentation, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.44.

15. Valarmathi, M.Nandhini, (2022), Screening of Depression using Electroencephalogram based on Convolutional Neural Networks, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.45.

16. Athimoolam, S Narmadha, R.Suguna, (2022), Smart Incubator for Premature Baby in an IOT Application, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.46.

17. Krishnapriya, S.SankarGanesh, P.Lingasamy, (2022), Whale Optimization-Based On Clustering Protocol for Vehicular Cognitive Radio Networks, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.47.

18. Subapriyadarsini, S.Balasubramanian, S.Murugalakshmi, (2022), ARIMA And LSTM Based Risk Prediction of Crime Data, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Departmentof ECE, P.S.R. Engineering College, Sivakasi, pp.48.

19. Senthil Arasi, K.Valarmathi, V.Vijayalakshmi, (2022), An Improved LSTM Based Framework For COVID-19 Risk Prediction, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College,

Sivakasi, pp.49.

20. Jasmine, P.Marichamy, S.Balasubramanian, (2022), An Effective Deep Learning Based Accurate Gait Detection Using MobileNet, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.50.

21. Sureka Nithila Princy, R.Vinoth, M.Rajkumari, (2022), Stock Price Prediction Based on Hybrid Classifier using Artificial Neural Network and Decision Tree Model for Higher Accuracy, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.51.

22. Jeeva Paulin, P.Ranjith kumar, P.Krishna Leela, (2022), Design of Textile Antenna using Jean Fabric, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.52.

23. Vanitha, R.Renugadevi, K.Lakshmi, (2022), BlockChain Based Secure and Energy Efficient Routing Protocol for Wireless Sensor Network, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.53
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24. Buvaneswari, R.Vinoth, S.Manikandan, (2022), An Improved Butterfly-Net Based Detection of Stones in Kidney Images, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.54.

25. Suganya, P.A.Mathina, P.Suresh Pandiarajan, (2022), An effective neural network based on clustering protocol for IoT enabled sensor network, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.55

26. Renugadevi, S.Rajeshshree, S.Mahalakshmi, (2022), Efficient data communication in underwater sensor network based on hybrid low energy adaptive cluster head selection algorithm, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.56.

27. Meenalakshmi M, (2022), Effective Classification of Emotion Detection System using AI Algorithms, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.57.

28. Gomathi M, Valarmathi, M.Nandhini, (2022), Design and Analysis of F-OFDM in 5G Network, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.58.

29. S.Yoga Ananth, P.Karuppasamy, (2022), Landside Monitoring Drone with Multiple Applications, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.59.

30. Nagaraj, P.Karuppasamy, (2022), Sentiment Analysis With Convolutional Neural Networks, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.61.

31. Pavithra, K.Ramalakshmi, (2022), Liver Tumor Segmentation Using Deep Resunet, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.63.

32. Murugan, (2022), Review of Microwave Imaging Technique For Medical Applications, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.65.

33. K P Yogalakshmi, Renugadevi, P.Suresh Pandiarajan, (2022), Energy-Efficient Cooperative Spectrum Sensing Scheme Based on D-M Theory for Cognitive Vanet Network, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.67.

34. Manikandan, G.Rajeswari, V.Sathyasree, M.Subahshini, (2022), Smart Blind stick with Voice, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.69.

35. Bromio Benedict, P.Karuppasamy, (2022), Automatic Segmentation of CT images with Deep Convolutional Neural network and multilayer perceptron, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.70.

36. Dhanam, (2022), Stack Based Configurable Logic Gates Technology for Hardware Security, International Conference on Recent Innovation in Science and Engineering (ICRISE 2022), Organized by Department of ECE, P.S.R. Engineering College, Sivakasi, pp.71.

37. Sasireka Rajendran, Vinoth Rathinam, Sugumari Vallinayagam, and Vipin Kumar Sharma., (2021) "Nano Biomaterials for Tissue Engineering Applications – Short Review", Proceedings of Fourth International Conference on Inventive Material Science Applications, (Springer -ICIMA 2021), Part of the Advances in Sustainability Science and Technology book series (ASST), pp:131-140, May 14-15, 2021. ISBN 978-981-16-4320-0. https://doi.org/10.1007/978-981-16-4321-7_12.

38. S Thayammal, G Sankaramalliga, S Priyadarsini, K Ramalakshmi, (2021), Performance Analysis of Image Denoising using Deep Convolutional Neural Network, IOP Conference Series: Materials Science and Engineering, Vol. No.1070, https://doi:10.1088/1757-899X/1070/1/012085.

39. G Saranya, R Vinoth, B Vidhya, B Maruthi Shankar, N V Krishnamoorthy., (2021)"Smart System for Diagnosing and Monitoring Oral Diseases", Published in the IEEE 5th International Conference on Intelligent Computing and Control Systems (ICICCS), Vaigai College of Engineering, Madurai, India May 6-8, 2021. ISBN: 978-1-6654-1272-8, https://doi:10.1109/ICICCS51141.2021.9432355.

FDP/Workshop & Seminar Attended:

Name of the faculty	Title of the programme	Organizer	Duration (from – to) (DD-MM-YYYY)
Dr.K.Valarmathi	FDP on Inculcating Universal Human Values in Technical Education	All India Council for Technical Education(AICTE)	06.12.2021-10.12.2021
	FDP on Microsoft Power BI Data Analyst Associate	ICT Academy	25.04.2022-29.04.2022

Name	Programme	Venue	Date
Dr.P.Ranjith Kumar	FDP on Microsoft Power BI Data Analyst Associate	ICT Academy ,P.S.R Engineering Collage .	25.04.2022-29.04.2022
Dr.P.Karuppasamy	FDP on Business Intelligence & Big Data Analytics"	SV College of Engineering, Tirupati,Andhra Pradesh	09.12.2021-15.12.2021
	FDP on Free and Open-Source ICT Tools for Effective Teaching-Learning and Research	National Institute Of Technical Teachers Training & Reasearch,chandigarh.	03.01.2022-08.01.2022
	FDP on Cyber Security	CEG Campus,Anna University,Chennai	17.01.2022-22.01.2022
	FDP on Wireless Communication	Thiagarajar College of Engineering, Madurai	24.01.2022-31.01.2022
	Inculcating Universal (UHV-I) Human Values in Technical Education	All India Council for Technical Education(AICTE)	31.01.2022-04.02.2022
	FDP on Data science Applied to Measurement and Control	MIT Campus,Anna University,Chennai.	31.01.2022-05.02.2022
	Electric Vehicle Design Master Class	PANTECH E-Learning	02.02.2022-04.03.2022
	Quantum Computing Fundamentals	Inderprastha Engineering College, Ghaziabad- U.P	07.02.2022-12.02.2022
Dr.S.Manikandan	FDP on Frontiers in AI based Multimedia Signal Processing	Mepco Schlenk Engineering College	17.01.2022-21.01.2022

Dr.S.Murugan	NPTEL Online Elite certification on " NBA Accreditation and Teaching Learning in Engineering" (12 week course)	IISc, Bangalore	Jan 2022 –April 2022
	FDP on NBA Accreditation and Teaching and Learning in Engineering	NPTEL	Jan-Apr 2022
	Research issues in Nanao Antennas for wireless communication	Mepco Schlenk Engineering College, Sivakasi	17.02.2022-19.02.2022
	Inculcating Universal Human Values in Technical Education	AICTE	09.05.2022-13.05.2022
Dr.P.Suresh Pandiyarajan	Frontiers in AI based Multimedia Signal Processing	Mepco Schlenk Engineering College,Sivakasi	17.01.2022-21.01.2022
Dr.S.Thayammal	Workshop on Statistical Techniques for research Methodology	Indian Statistical Institute, Mumbai	14.12.2021-18.12.2021
Dr.R.Meenaprakash	FDP on Microsoft India & SAP India led faculty Development Program on "Artificial Intelligence".	Techsaksham Program	24.01.2022-29.01.2022
Mr.S.Balasubramanian	ATAL FDP on "Data Analytics in Smart Healthcare"	Knowledge Institute of Technology.	06.12.2021-10.12.2021
.Mrs.K.Ramalakshmi	Inculcating Universal Human Values in Technical Education	All India Council for Technical Education	03.01.2022–07.01.2022
	Impact of Digital Pedagogy in Professional Development of Engineering Teachers	Sri Sai Ram Institute of Technology, Chennai	21.01.2022–28.01.2022
		ICT Academy	

	Microsoft Power Bi Data Analyst Associate		25.04.2022 -29.04.2022
Mr.S.Athimoolam	FDP on Frontiers in AI based Multimedia Signal Processing	Mepco Schlenk Engineering College	17.01.2022-21.01.2022
	International Conference on Recent innovations in science and Engineering (ICRISE 2022)	PSR Engineering College	21.02.2022-23.02.2022
Mr.N.S.Yoga Ananth	Workshop on Antenna Design for Military Biomedical and Wireless Applications	Care College of Engineering	20.12.2021-23.12.2021
	FDP on AI and Soft Computing Algorithms for Antenna Design	NITTTR	17.01.2022-21.01.2022
	Data Science applied to Measurement and Control	Anna University, Chennai	31.01.2022-05.02.2022
	Research Issues in Nano Antennas for Wireless Communication	Mepco Schlenk Engineering College	17.02.2022-19.02,2022
	Antenna Design for Military Biomedical and wireless application	CARE COLLEGE OF ENGINEERING	20.12.2021-23.12.2021
	Workshop on Research issues in Nano Antennas for Wireless Communication	Mepco Schlenk Engineering College	17.02.2022-19.02.2022
	Orientation/Refresher	NITTTR	03.01.2022-08.01.2022

Ms.S.Mahalakshmi	program on Free and Open Source ICT tools for effective teaching learning and research		
	Orientation/Refresher Program on Quantum Computing Fundamentals	AICTE	07.02.2022-12.02.2022
Ms.M.Rajkumari	FDP on Research Opportunities in Artificial Intelligence &Machine Learning	Sai Ram Institute of Technology	16.12.2021-22.12.2021
Ms.B.Dhanam	FDP on Artificial Intelligence in VLSI Chip Design	ATAL	06.12.2021-10.12.2021
Ms.S.Anusankari	Novel Smart irrigation system in agriculture using solar and sensors	PSR Engineering College	21.02.2022-23.02.2022
	FDP on IoT and its application in Instrumentation	E&ICT Academy, IIT Guwahati	21.03.2022-26.03.2022
Ms.M.Nandhini	Technology Driven Healthcare Systems	Jawaharlal College of Engineering and Technology , Lakkidi,Palakkad , Kerala.	18.01.2022-24.01.2022
	FDP on Microsoft Power BI Data Analyst Associate	ICT Academy	25.04.2022-29.04.2022
Ms.K.Lakshmi	Embedded System Design using Intel SoC FPGAs	Sri Sivasubramaniya Nadar college of Engineering	01.02.2022-05.02.2022

Mr.S.Sankarganesh	Cyber security	Anna University ,Chennai	17.01.2022-22.01.2022
	Data science applied to measurement and control	Anna University ,Chennai	31.01.2022-05.02.2022
	FDP on Quantum Computing Fundamentals	Inderprastha Engineering College ,Ghaziabad ,Uttar Pradesh	07.02.2022-12.02.2022
	Perspective Amelioration In Computing Via Iot In Real Time Applications	Nehru Institute Of Engineerin Gand Technology	11.04.2022-12.04.2022
Mrs.P.A.Mathina	Inculcating Universal Human Values inTechnical Education	AICTE	20.12.2021-24.12.2021
	Free and open sources ICT Tools for Effective Teaching Learning and Research	NITTTR,Chandigarh	03.01.2022-08.01.2022
	Inculcating Universal Human Values in Technical Education	AICTE	11.04.2022-15.04.2022
Mr.G.Lingasamy	Free and open sources ICT Tools for Effective Teaching Learning and Research	NITTTR,Chandigarh	03.01.2022-08.01.2022
Ms.P.Lingeswari	Free and Open-Source ICT tools for effective teaching learning and research	NITTR, Chandigarh	03.01.2022-08.01.2022
	Inculcating Universal Human Values in Technical Education	AICTE	11.04.2022-15.04.2022

Mrs.M.Vimala	Recent Trends in Artificial Intelligence	ATAL	29.11.2021-03.12.2021
	Inculcating Universal Human Values in Technical Education	AICTE	31.01.2022-04.02.2022

STUDENT CORNER

Achievements:

Innovation in Manufacturing Processes competition organized by INAE and IIT Hyderabad-IMP-2021:

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Y Ravi T Sivakumar	Wearable Fault detection	Dr.R.Vinoth	Certificate of participation Received
2	N Jeyashree M Jeyajothi	IOT Based automated paralysis	Dr.K.Valarmathi	Certificate of Participation Received
3	P.Yogiramji	IOT based Covid-19 Safety For Indoor Monitoring System	Dr.P.Karuppasamy	Certificate of Participation Received
4	M.Muneeswari	IOT based An Infant Cry Detection And Information In Dispensaries	Dr.K.Valarmathi	Certificate of Participation Received
5	G.Subhaash	Spy Robot using Android Application	Dr.K.Valarmathi	Certificate of Participation Received
6	B.Sathees Kumar	IOT Enabled Child Safety System	Mr.S.Santhosh	Certificate of Participation Received
7	R.Sowmiya. S.Sangeetha	Kiosk For Attendance Management, Temperature Measurement, And Hand Disinfection.	DR. R. Renugadevi	Certificate of Participation Received
8	G.Subhaash	Spy Robot using Android Application	Dr.K.Valarmathi	Certificate of Participation Received

BIRAC 2022 - Bio Technology Industry Research Assistance Council (EYUVA):

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Esakkimuthu M	Menstruation Management Application	Dr.K.Valarmathi	Finalist
2	Thamu V	IOT Based Automated Paralyzed Patient Healthcare System	Dr.R.Vinoth	Finalist

MEITY-2022 Government Of India:

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Jeyajothi M	Smart School Bus Monitoring And Alerting System Using IOT With	Dr.P.Karuppasamy	Awaiting for result
2	Esakkimuthu M	Menstruation Management Application	Dr.K.Valarmathi	Participated
3	Satheeskumar B	Music Recommendation Based On Face Recognition System	Dr.P.Marichamy	Participated

Ideathon 2021-22:

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Kalaikumar M	Tracking Of Food Waste Protective Usage	Dr.K.Valarmathi	Participated
2	Balaji Sankaran .R Marimuthu.L	Fitness Tracking Application	Dr.R.Meena Prakash	Participated

Waste to wealth 2021-22 ,Government of India:

S.No	Name of the Student	Title of the Project	Supervisor	Status
1	Muthukumar.V	Current Produce From Septic Tank Waste	Dr.P.Marichamy	Participated
2	Nivaas.B	Generating Petrol From Plastic Waste	Dr.K.Valarmathi	Participated
3	Selvam.A	Mat From Hair Waste	Dr.R.Meena Prakash	Participated

Hackfest –Mistral systems Private limited, Bangalore:

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Dhanalakshmi P	Pregnant Women Safety System	Dr.R.Vinoth	Participated
2	Esakkimuthu M(final round)	IoT Based Water Monitoring System	Dr.P.Karuppasamy	Finalist
3	Mahendhrakumar M	Vehicle Pollution Detection Using Machine Learning	Dr.K.Valarmathi	Finalist

Mini Drone 2022, Ministry of Education, IIT Kanpur:

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Kalaikumar M	Mini Drone	Dr.K.Valarmathi	Participated
2	NoorJahan Rehana.A	Mini Drone	Dr.P.Karuppasamy	Participated
3	Venkadeswari.V	Mini Drone	Dr.S.Murugan	Participated
4	Muthukumar	Mini Drone	Dr.R.Vinoth	Participated

Tamilnadu student innovator, Government of Tamilnadu :

S.No	Name of the student	Title of the Project	Supervisor	Status
1	Varshini M	Plant leaf Disease Classification	Dr.R.Meena Prakash	Participated
2	Rajesh Kumar R	Water Management System	Dr.P.Karuppasamy	Participated
3	Viji Arthi S	An Industrial Application Based an Effective Air and pollution Monitoring	Dr.P.Karuppasamy	Participated
4	Janani R	Self-Balancing Robot for Transportation	Dr.Renuga Devi	Participated
5	Ganeshkumar K	Detection and Identification of Locust in Plants.	Dr.P.Ranjith Kumar	Participated
6	Rekha L	Automated Medical Waste Segregation	Dr.K.Valarmathi	Participated

Placement Details

Placed Students:

Name of the Student	NAME OF THE COMPANY
J.CHITRA	Cognizant Technology Solutions India Pvt Ltd
V.LAVANYA	Cognizant Technology Solutions India Pvt Ltd
N.PREMKUMAR	Cognizant Technology Solutions India Pvt Ltd
G.ARCHANA	Mind Tree
C.LISHA RAMYA	**TCS**
M.PETCHI MUTHU	Infosys Ltd
B.MARIMUTHU	Wimera systems Pvt Ltd
P.SRINIVAS	Ava Software Pvt Ltd
A.MARI SHANKER RAJA	Caliber interconnect solutions
K..NANDHINI	Smart DV
S.SRIDEVI	Smart DV
S.NARMADHA	Tessolve Semiconductor Pvt Ltd

ALUMNI CORNER

Mr.R.R.Athish

Senior system engineer,

Cognizant technology solutions, Chennai.

Thank you for giving me this opportunity to share my experience with our college.

My 4 year journey with PSREC started in 2011 with lots of aspiration in my heart which came to reality when i finally got placed in CTS. All of it was possible with the right direction provided by all the faculties right from the beginning of this journey. Different personality development sessions conducted in college helped in grooming a student to bring out a professional person .

PSREC gave me numerous chances to show and enhance my talent at every stage. Different aptitude sessions and timely assessment of the same ,various GD sessions ,mock interviews etc were conducted which gave me enough confidence to face and crack the recruitment process of CTS..

Mr.S.Sendurapandi

Azure Devops (Development and Technical Support),

Mediterrean shipping Company,

Chennai

I am overwhelmed with the opportunity I got to share my thoughts and feelings for the college website. I am really blessed to have such teacher's and mentor's in my life from which i learned a lot and implemented to make my future bright. Today where i am standing in the career path is the second level and it's too strong and bold. Just because the first level roots are nourished in a great and best way. Supportive seniors and faculty, beautiful campus, quality education, real world experiences, and amazing friends. its everything one needs from a college, and a network developed for life. The growth i have seen in myself due to PSR, is invaluable. It has taught me things far beyond bookish knowledge and helped me broaden my horizons not only do they Students are encouraged to take initiatives and hone leadership skills, so that they can cope with the world outside the campus. With the up to date laboratory facilities, and various software, large libraries on campus as well as online, students can easily access study materials to ensure quality output.

There are canteen facilities and the sports grounds keep the students physically active as well. The classes are very interactive and faculties ensure that every student understands what is being taught before proceeding. All in all PSREC provides every student exactly what they need for life. Proud to be a part of PSREC.

STUDENT'S Article
BLOCKCHAIN
(A.Abishek II ECE)

What is the blockchain? If it's such a big deal, why?

Blockchain is a method of storing information in such a way that it is difficult or impossible to modify, hack, or trick the system. Let's take a closer look at what it is.

A blockchain is simply a A digital record of transactions that is duplicated and distributed throughout the blockchain's complete network of computer systems. Each block on the chain comprises several transactions, and whenever a new transaction happens on the blockchain, a record of that transaction is added to the ledger of every participant. Distributed Ledger Technology refers to a decentralized database controlled by numerous members (DLT).

A blockchain is a form of distributed ledger technology in which transactions are recorded with an immutable cryptographic signature known as a hash.

This implies that if one block in a chain was altered, it would be obvious that it had been tampered with. To damage a blockchain system, hackers would have to alter every block in the chain, across all distributed copies of the chain. Blockchains such as Bitcoin and Ethereum are constantly expanding as blocks are added to the chain, greatly increasing the security of the ledger. Why there is so much curiosity surrounding blockchain?

Cryptocurrencies like Bitcoin and Ethereum are overhyped and, in some cases, a solution looking for a problem. However, there are a few exceptions to this generalization. For cryptocurrencies, they've been incredibly successful in eliminating the double-spending problem and offering a somewhat useful means for covertly spending money and transmitting it to others over the internet.

Two people can't transact simultaneously with the same money because of the double-spending conundrum By using a central database, a bank allows clients to use their cards at two different locations at the same time. For each transaction, money is taken from your account via your credit card company's centralized database.

No one database maintains the answer to who owns whose money is in a "distributed" system, such as blockchain. On the contrary, there are many variations throughout the world. When dealing with distributed systems, the double-spending problem is a regular occurrence. Your money may end up being wasted if you have two copies of a database in two different countries at the same time. Blockchain technology prevents this.

Transparency while preserving the privacy

There is a growing need for greater transparency about the provenance of our products - whether they be food or clothing- We'll probably have mobile devices soon that can track your chicken from the farm to your dinner plate.

To prevent the trafficking of blood diamonds, firms including DeBeers, Fura, and Everledger are developing blockchains for this purpose. It follows the diamond along the supply chain, with its location being recorded and updated at each step after a conflict-free diamond certification is submitted to the blockchain.

This allows purchasers to recognize and reject blood diamonds at the time of purchase, and it also allows diamond miners to trace where their stones end up and interact with the individuals at the top of the supply chain... To ensure that all parties are treated equally in such a system, diamond miners would be given a genuine voice to influence how things are managed.

With blockchain, not only is more transparency possible but so is unrivaled privacy as well.

However, other blockchains are invitation-only private networks. This level of privacy is required by some organizations, especially those that deal with private information, such as healthcare providers. However, businesses as a whole are beginning to accept this level of privacy. Hyperledger Fabric has already been used by IBM to create private blockchains for significant corporate activities, and several other multinational firms are expected to do the same.

A corporation's refusal of openness won't have any influence on blockchain's utopian goal, as public chains will stay under the authority of the public.

What you need to understand well about blockchain,

1. Specifically, blockchain is a form of a database.
2. When it comes to how it saves information, it differs from a normal database.
3. As new data comes in, it's added to a new block of information. It's then linked to the previous block so that the data is arranged in chronological sequence.
4. There are many other forms of information that may be kept on a blockchain, but transactions have been the most often used type of information thus far.
5. Cryptocurrencies such as Bitcoin use blockchain technology in a decentralized manner.
6. Immutable decentralized blockchains indicate that the data input cannot be changed. In the case of Bitcoin, this implies that all transactions are permanently recorded and available to anybody who wants to see them.

EVOLUTION OF WEB 3.0
(K.Karuppasamy , II ECE)

Web 3.0 is expected to usher in a new age of web interactions, which will stamp a key change in how web developers design websites.
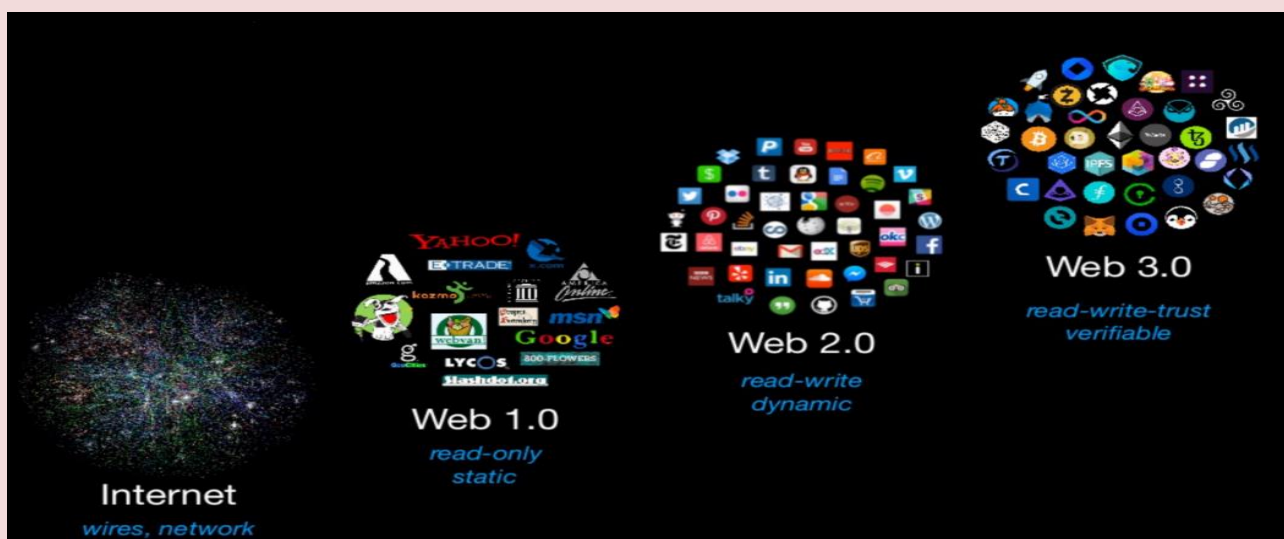
The innovations that web 3.0 will bring to the internet will catapult it to a whole new level. We trust that these innovations will make the internet smarter and our lives more convenient and secure. To fully understand these innovations, we need to first visualize the evolution of the internet as we perceive it

So, at first, the question arises **"WHAT IS THE EVOLUTION OF WEB?"**

Web technology and how it is utilized have undoubtedly developed within the last few years, each evolution has brought forth new tools and techniques that are valuable for people. These evolutions have popularly been called Web1.0, Web2.0 & Web3.0 in the media.

Coming to Web 1.0 which is also known as syntactic web or read-only web, is the era in which a user's function is limited to reading the information given by bloggers.

Now coming to the Web 2.0 era often mentioned as social web or read-write web, is distinguished by the cooperation and collaboration of interaction between web users and sites that link's people to each other with the help of UI with individual user space.

Social media platforms like Facebook, Instagram, and Twitter are some of the most well-known Web2.0 applications. Web technologies **HTML5**, **CSS3**, and **JAVASCRIPT** frameworks such as **React Js** , **Angular Js**, and **Value Js** enable entrepreneurs to innovate creative ideas, continuing to allow users to contribute more to the social web. Creators only need to create a way to enable and engage users since Web2.0 is designed around them.

Now, the problems that we face with Web 2.0 is that,

1. Data is stored on a centralized server, resulting in security breaches.
2. Without considering the people's concerns, big companies play a monopoly with their data for profit.
3. False info, spam, and fake IDs are easily shared across the internet.
4. People must rely on big companies to address their security and privacy concerns.

What if computers could grasp the meaning behind the information? What if they could learn "what were interested in?" so they could help us with what we're searching for. It can recognize people, places, events, companies, products, movies, and so on.

Let's look at the features of Web 3.0 to better grasp its fine points and details.

1. Semantic web- expanded data connecting.
2. AI-equipped in Web 2.0
3. 3D graphics
4. Ubiquitous
5. Decentralization of data
6. Edge computing
7. The social connection will be revolutionized
8. Search results that are more appropriate and accurate
9. As the internet grows more customizable, working on it becomes a lot simpler
10. It will be much easy to share information.
11. Surfing the web more efficiently.
12. Compelling correspondence.
13. Change the way people work together.
14. Better portraying with a more personalized touch.
15. Reduce the threat of centralized server failures, and provide users complete control over their data.

We, INCRIX, are working towards creating a community where the concepts of Web 3.0 are possible for everyone.

VIRTUAL REALITY(VR)
(Ashwini, II ECE)

What is Virtual Reality and Why is it So Popular?

VR has been around as a fictional topic for as long as people can remember, and now it is taking over the gaming world. I know that VR is the leaps and bounds that computers have made since color screens were first invented.

The truth is that technology has become an integral component of our daily lives. Virtual reality is here to stay, with applications in video gaming, health care, education, and other fields. It's a puzzle. But what precisely is virtual reality?

Computer technology is utilized to create a virtual world in virtual reality (VR). Virtual reality, in contrast to traditional interfaces, immerses the user in a virtual environment. Users are engaged in 3D worlds and may interact with them rather than looking at a screen. This virtual environment is produced by simulating as many senses as possible, including vision, hearing, touch, and even smell. Near-real VR experiences are only constrained by the availability of content and low-cost processing power.

In terms of technology, addressing the question "what is virtual reality?" is simple. A person may explore and interact with three-dimensional computer-generated surroundings (VR) in a virtual reality environment. An individual can get engaged in a virtual environment and engage in a series of activities while doing so. For example, virtual reality goggles. A computer-generated simulation of an environment or a three-dimensional image in which people may interact in a way that seems substantial, real, or real-looking.

IN WHAT WAY DOES VIRTUAL REALITY WORK?

Who hasn't pondered how virtual reality works? Is it practical for a headset to make you feel as if you're flying above a city when you're just walking around your house? These technologies can do far more than merely substitute what we can see.

VR is expected to be worth $184.66 billion by 2026, making it one of the world's fastest-growing technologies. Virtual reality (VR) is becoming increasingly common in homes and businesses throughout the world, giving a realistic atmosphere and setting that tricks us into thinking we're somewhere else completely. This is where the heart of virtual reality technology may be located. You may engage with new worlds by donning a VR headset, which transports you to a different reality.

Our understanding of the world as humans is shaped by the concepts we've acquired over time. It's natural to believe what we see, hear, and feel around us. According to VR designers, use principles of perceptual perception and notions about how we interact with the world around us to create settings that appear as genuine as the world around you.

As a consequence, virtual reality headsets are nothing more than gadgets designed to replace our physical world with a virtual one. Gyroscopic sensors in headsets monitor your motions and activities in a virtual environment. Additionally, your headset may access applications for your VR experience or connect with other programs, via external cameras and computer systems.

The Future of Virtual Reality

VR already has a significant impact on our daily lives. The entry of major corporations into the market will undoubtedly accelerate VR's growth.

1. By 2020, virtual, augmented, and mixed worlds will be worth USD 150 billion.
2. Stand-alone VR headsets will become the standard in the future.
3. Virtual changing rooms are becoming more popular.
4. To promote the use of virtual people in social interactions.
5. There will be headsets in the shape of sunglasses.
6. Anxiety problems are treated with this medication.
7. VR engagement will be possible with smart wearables.

It is evident that VR is satisfying consumer requirements now, and it has the potential to play a significant role in the future of education and training. Because of virtual simulations, people may now have real-life-like experiences without paying a fortune. VR is still in its early stages, but we have high hopes for its future.

POTENTIALS FOR USE :

1. Medico-Healthcare
2. Healthcare Simulation Training Using Virtual Reality
3. It's all about digital marketing these days
4. Training and education
5. Mines and Mining
6. Applications in flight and motor vehicles
7. Medicine
8. Military
9. Space
10. Mechanics and robots

Collaborative Virtual Reality in the Workplace

1. Construction, Architecture, and Engineering (AEC)
2. Manufacturing
3. Consumer research