P.S.R. ENGINEERING COLLEGE

An Autonomous Institution & Affiliated to Anna University, Chennai, Accredited by NAAC with A+ Grade & NBA & Recognized Under 12(B)of the UGC Act,1956,

NEWS LETTER

Vol:6 Issue:2

December 2020 – May 2021

Department of Electronics and Communication Engineering

Student Editors:
R.Vijayprakash IV ECE
P.Ganeshkumar III ECE

Editor's Message

"Engineers like to solve problems. If there are no problems handily available, they will create their own problems."- *Scott Ad*

"The engineer has been, and is, a maker of history."
James Kip Finch

Chief Editor:
Dr.K.Valarmathi Prof & Head/ ECE
Faculty Editors:
Dr.RMeena Prakash ASP/ECE
Ms.B.Dhanam AP/ECE

Inside this Issue

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 and research.

DEPARTMENT MISSION

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

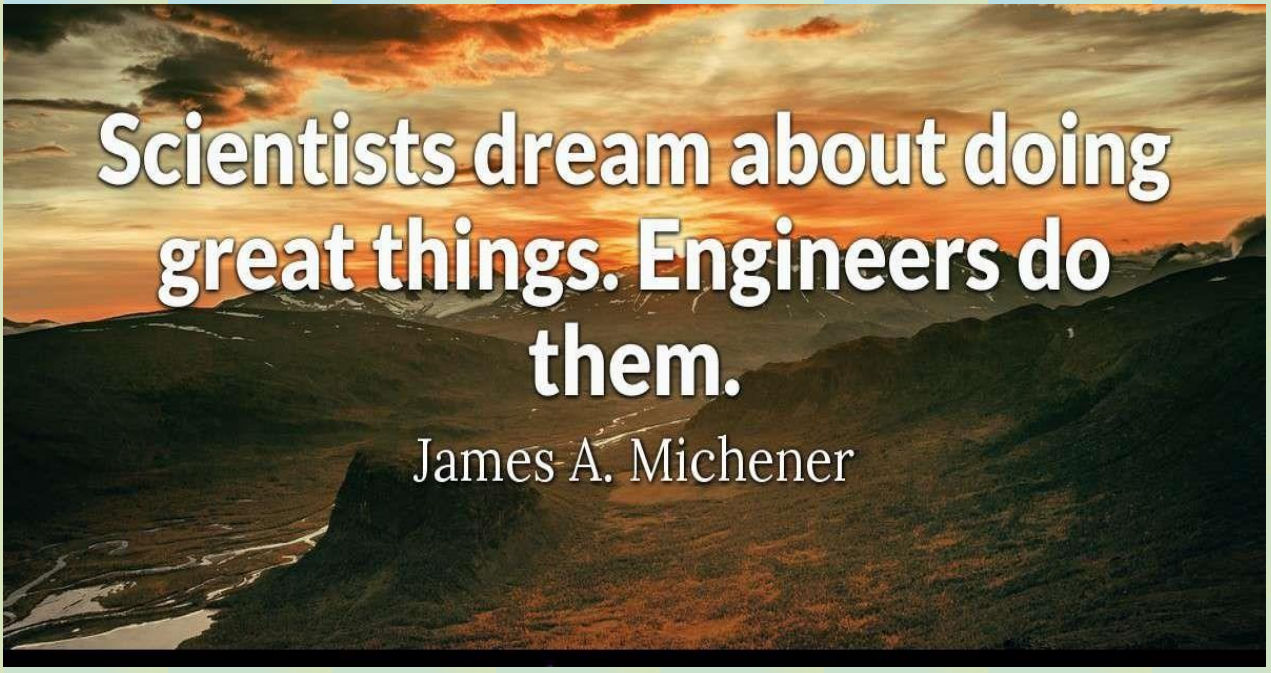
DEPARTMENT ACTIVITIES

List of Funded Projects:

Title of Project	Funding Agency	Amount	Status (Submitted / Ongoing / Completed)
RPS - A Novel Approach for the Design and Implementation of Wearable Antennas by detecting the Stages of Brain Tumor	AICTE	7.52 Lakhs	Ongoing
ATAL FDP – Internet of Things	AICTE	1 Lakh	Completed
MODROBS:Mixed signal circuit design lab	AICTE	13 Lakhs	Completed

Ph.D. Awarded Under Department Supervisor:

Name of the Research Scholar	Register Number	University	Supervisor Name	Title of the Thesis	Date of Viva Voce
Mr.C. Kalyana Sundaram Mepco Schlenk Engineering College,Sivakasi	1413489179	Anna University, Chennai	Dr.P.Marichamy	Studies on the Identification of Taste Disorder through EEG Signal Analysis	25.01.2021



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

Name of the candidate	Register Number	Supervisor Name	University Registered	Area of Research	Status
Ms. Kalaivani S Government Polytechnic College, Coimbatore	21244897364	Dr.P.Marichamy	Anna University, Chennai	Nano Sensors	Course work on going
Mr. Gopinath D Ramco Institute of Technology, Rajapalayam	21144897460	Dr.P.Marichamy	Anna University, Chennai	Non-Invasive Antennas	Course work on going
Mrs.V. Srirenga Nachiyar, Ramco Institute of Technology, Rajapalayam	20241136	Dr.P.Marichamy	Anna University, Chennai	Medical Signal Processing	Course Work Completed
Mrs. Lingeswari P.S.R Engineering College, Sivaksi	20241982	Dr.P.Marichamy	Anna University, Chennai	Wireless Communication	Course Work on going
G. Siva Kumar Ramco Institute of Technology, Rajapalayam	20241385	Dr.P.Marichamy	Anna University, Chennai	Mobile Adhoc Networks	Course Work on going
Mr.S. Balasubramanian P.S.R Engineering College, Sivakasi	1314489148	Dr.P.Marichamy	Anna University, Chennai	Medical Data Mining	Provisional Registration Confirmed
Mrs.B. Dhanam P.S.R Engineering College, Sivakasi	18244891514	Dr.P.Marichamy	Anna University, Chennai	VLSI Design	Provisional Registration Confirmed
Mr. Raj Kumar SVS College of Engineering, Coimbatore	1414489833	Dr.P.Marichamy	Anna University, Chennai	Indigestible Antenna	Provisional Registration Confirmed
Mr.C. Balamurugan National Engineering College, Kovilpatti	1414489780	Dr.P.Marichamy	Anna University, Chennai	Cognitive Radio	Provisional Registration Confirmed
Mrs.P.A. Mathina P.S.R Engineering College, Sivakasi	22284891122	Dr.K.Valarmathi	Anna University, Chennai	Networks	Registeration 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.P. Dinesh Kumar VSB Engineering College, Karur	1614489383	Dr.K.Valarmathi	Anna University, Chennai	Artificial Intelligence, Wireless Sensor Networks	Provisional Registration Confirmed

Mrs.S. Jeevitha Kalasalingam Institute of Technology, Srivilliputhur	16244897309	Dr.K.Valarmathi	Anna University, Chennai	Biomedical and Image Processing	Provisional Registration Confirmed
Mrs.M. Rajashanthi P.S.R Engineering College, Sivakasi	17234891382	Dr.K.Valarmathi	Anna University, Chennai	Mobile Adhoc Network	Synopsis Submitted
Mrs.M. Swarnasudha Ramco Institute of Technology, Rajapalayam	17234891501	Dr.K.Valarmathi	Anna University, Chennai	Data Analytics	Provisional Registration Confirmed
Mr.P. Ravikumaran Fatima Michael College of Engineering & Technology, Madurai	1514489952	Dr.K.Valarmathi	Anna University, Chennai	Computer Networks	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 on going
Mr.P. Govindamoorthi PSN Engineering College, Tirunelveli	18124897276	Dr.P.Ranjith Kumar	Anna University, Chennai	Health Care	Provisional Registration Confirmed
Mrs.M. Vimala P.S.R. Engineering College, Sivakasi	18244897235	Dr.P.Ranjith Kumar	Anna University, Chennai	Medical Image Processing	Provisional Registration Confirmed

Events Organised:

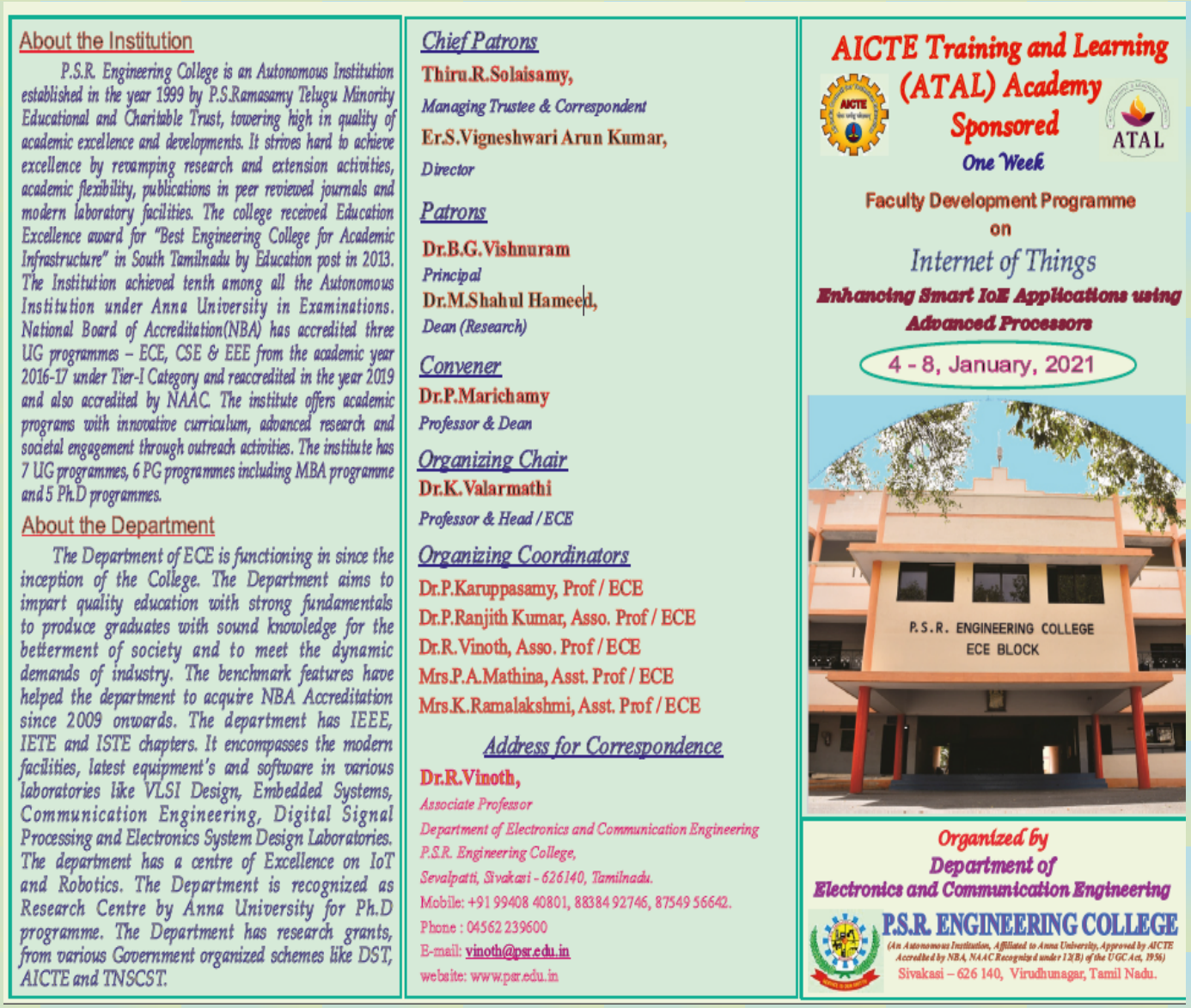
FDP/STTP/Workshop Conducted:

The ATAL Sponsored one week Online Faculty Development Programme (FDP-2021) was organized on "Enhancing Smart IoE Applications using Advanced Processors" from 4th January 2021 to 8th January 2021.

Chief guest was Dr.M.G. Sethuraman who enlightened the participants about the importance of how faculty development programs help in developing R&D culture in educational institutes.

The Resource Persons were:

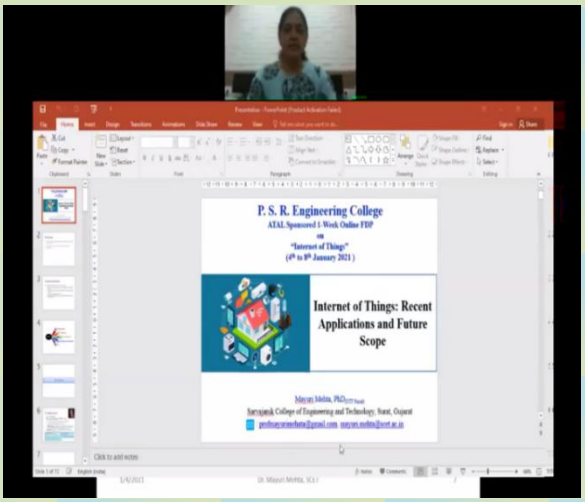
1. **Dr. Mayuri A. Mehta,**
2. **Dr.C. Christopher Asir Rajan**
3. **Mr.S.Jeffrey**
4. **Mr.Senthilkumar Murugesan**
5. **Dr.S. Thayammal**
6. **Dr. Selvamani Indrajith**
7. **Dr.P. Karuppasamy**
8. **Dr.P.S. Godwin Anand**
9. **Dr.P. Muruganantham**
10. **Dr. Lalit Singh**



Photographs of Events:

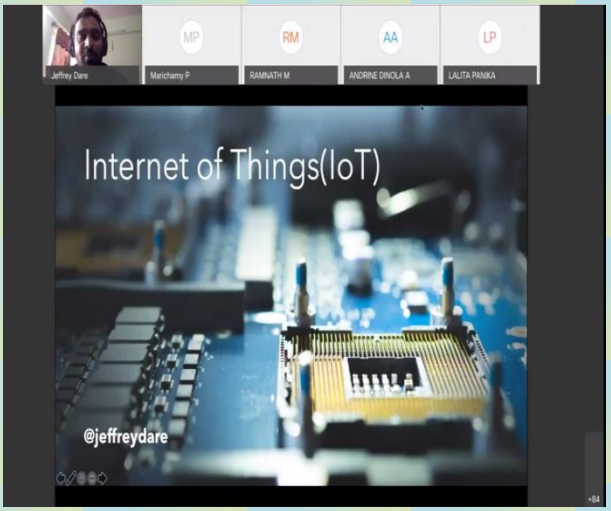
Session1

Session 2



Session 3

Session 4



Session 5

Session 6

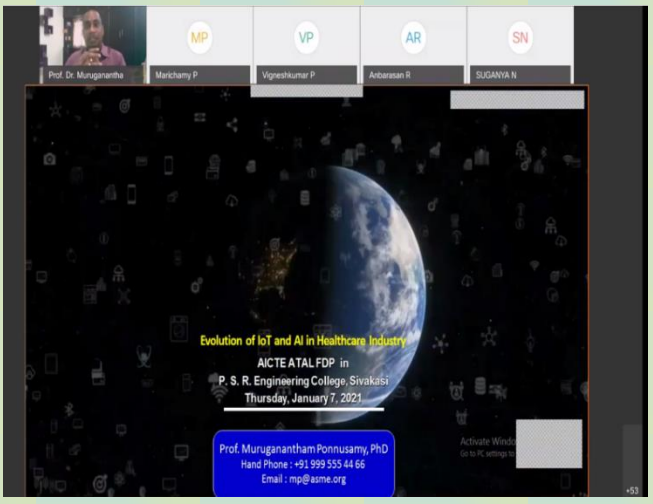
Session 7

Session 8

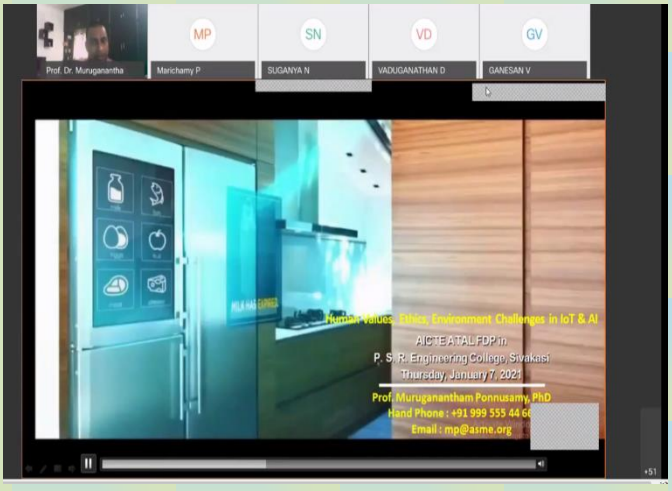
Session 9

Session 10

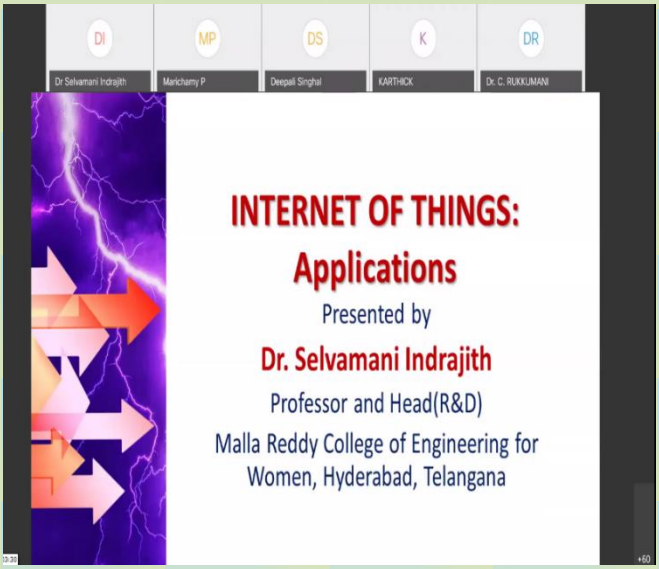
Session 11



Session 12



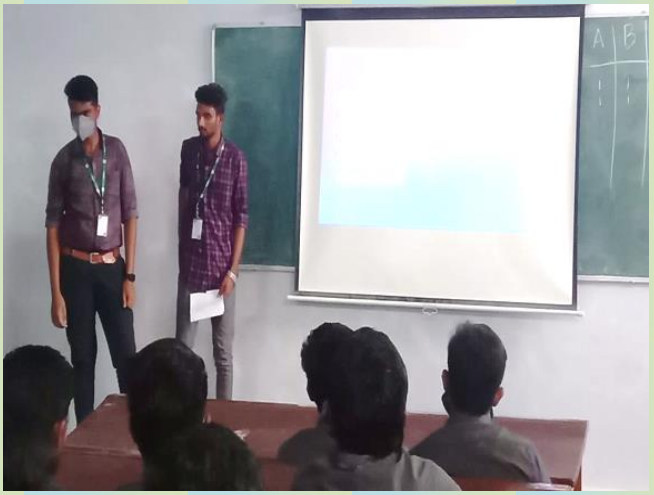
Session 13



IETE Students's Forum Activities:

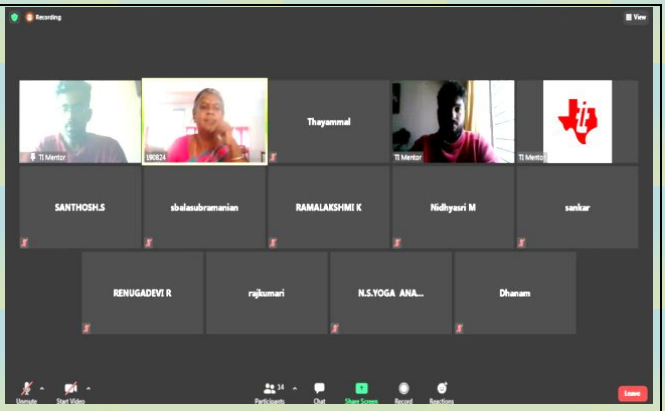
Best Manager/ Situation Handling:

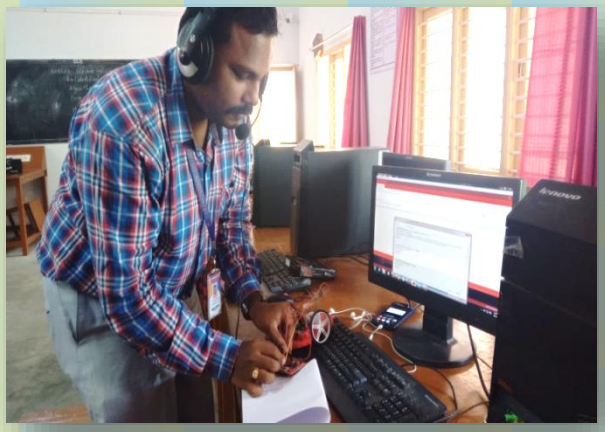
IETE Students' Forum (ISF) has conducted soft skill development events Seminar, Quiz, Best manager/situation handling on 20-03-2021 to encourage the students for enhancing their communication, management skills.



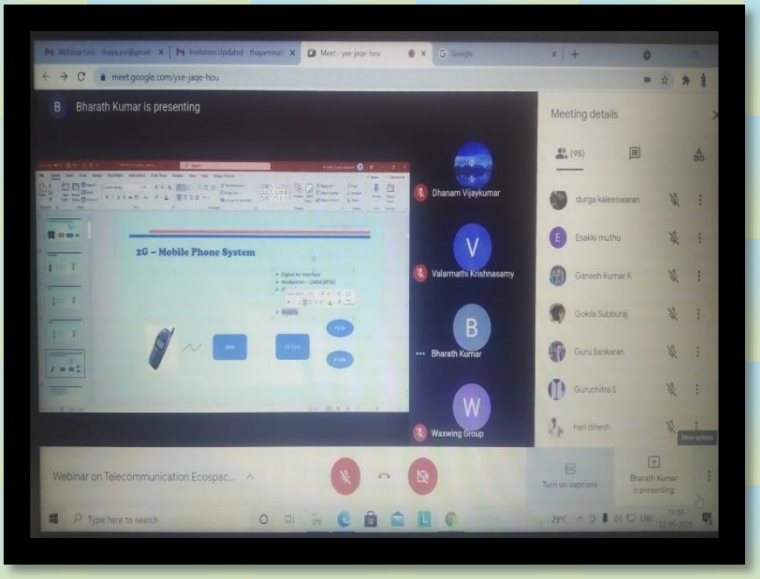
Around 115 students participated in the events enthusiastically with their courage and knowledge by actively taking part in the event.

IETE Students' Forum (ISF) has organized an online training program on "**Texas Instruments – Advanced Development Tools for Robotics**" from 03-04-2021 to 08.04.2021 to enhance the knowledge about development tools in Robotics



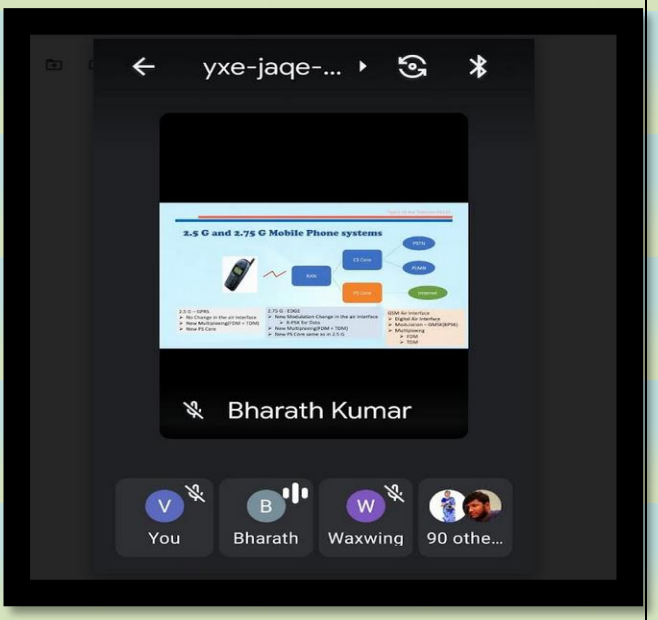


The resource people Er.T.Nishanth and Er.R.Bharath, Embedded System Engineers from EdGate Technologies Pvt. Ltd., Bangalore handled the Training program with more informative and effective programming phases. Around 55 Faculties and students practiced hands on session with Robotic kit TI-RSLK.



IETE Students' Forum (ISF) has conducted webinar on "**Telecommunication Ecospace and Evolution**" on 22-05-2021 to encourage the students for enhancing their technical knowledge in telecommunication.

The resource person Er.S. Bharath Kumar,4G / IMS Trainer, Mavenir, Bangalore explained the generation of the telecommunication from 1G to 4G evolutions and also elaborately given the difference between each and every generation and what is bit rate/data rate is used. Also, he presented the various opportunities in telecommunication field with corresponding requirements of skill/knowledge. Totally 90 students participated in this webinar and get benefited.



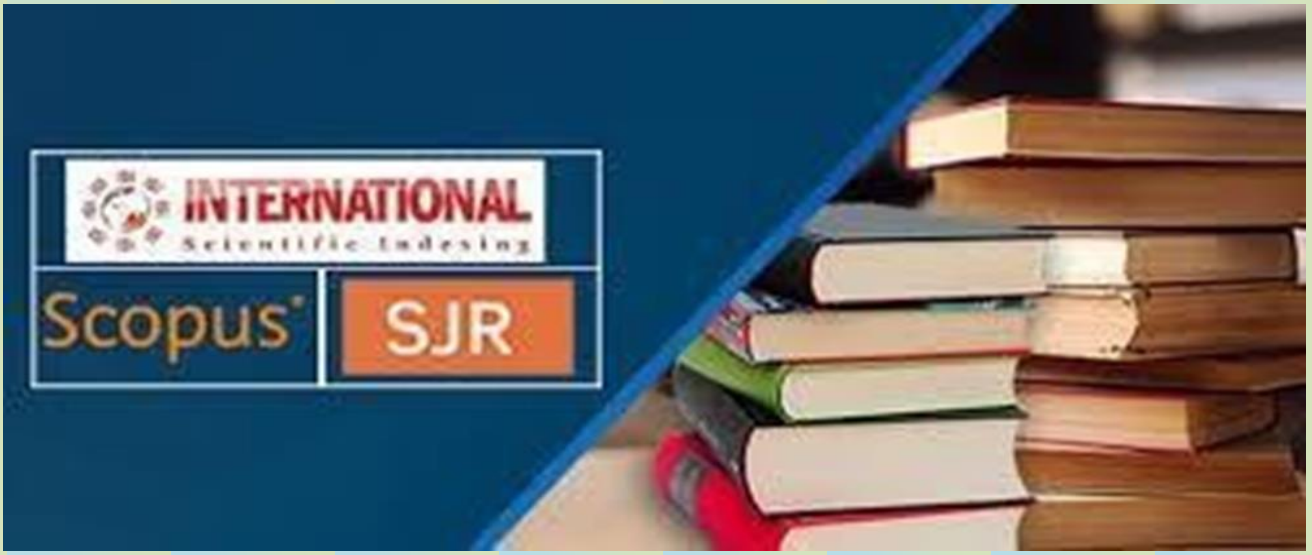
FACULTY CORNER

Books / Books Chapter:

1. 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, Taylor & Francis Group, Boca Raton, ISBN: 9781003048855, https://doi.org/10.1201/9781003048855.

2. **Vinoth Rathinam**, Sasireka Rajendran, and Sugumari Vallinayagam., (2021) "Nano Biomaterials for Tissue Engineering Applications – Short Reviewrs" - 5th International Conference on "Inventive Material Science and Applications" (Springer -ICIMA 2021) 9789811643217, ISBN: 9781003123781, https://doi.org/10.1201/9781003123781.

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



Journal Publication:

- Balamurugan C., **Marichamy P**., Harichandran R., (2021), "Performance Comparison of Microstrip Patch Antenna Using h-BN Nano ceramic Substrate and FR4 Substrate",Wireless Personal Communications (Springer US), Vol.120, pp:2919–2934. https://doi.org/**10**.1007/s11277-021-08592-z.
- Balamurugan Chinnagurusamy, **Marichamy Perumalsamy**, (2021), "Multiband microstrip patch antenna using copper nano radiating element for X band and C band applications", International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (Wiley Online Library), https://doi.org/10.1002/jnm.2897.
- Kamaraj Arunachalam, **Marichamy Perumalsamy**, Kavyashri K Ponnusamy, (2021), "Fault Tolerance in Reversible Logic Circuits and Quantum Cost Optimization", Computing and Informatics (Slovak ACAD Sciences Inst Informatics), Vol. 39, No.5, pp. 1099 – 1116. https://doi.org/10.31577/cai_2020_5_1099.
- Kamaraj A, **Marichamy P**, Abirami R, (2021), Multi-Port Memory Design in Quantum

Cellular Automata Using Logical Crossing", Journal of Microelectronics, Electronic Components and Materials (Informative MIDEM), Vol. 51, No.1, pp. 49-61. doi:10.33180/InfMIDEM2021.103.

- Erana Veerappa Dinesh Subramaniam, **Valarmathi Krishnasamy**, (2021), Energy aware smartphone task offloading to the cloud using gray wolf optimization", Journal of Ambient Intelligence and Humanized Computing (Springer), Vol. 12, No.3, pp. 3979- 3987. https://doi.org/10.1007/s12652-020-01756-y.
- M Swarna Sudha, **K Valarmathi**, (2021), "An optimized deep belief network to detect anomalous behavior in social media", Journal of Ambient Intelligence and Humanized Computing (Springer Berlin Heidelberg), pp:1-10, https://doi.org/10.1007/s12652-020-02708-2.
- Indira Bharathi, Veeramani Sonai, **Valarmathi Krishnasamy** (2021), "GA based Adaptive Learning Algorithm for IPv4 Packet Classification", Design Engineering, No.7, pp. 3236-3256.
- **Paulraj Ranjith Kumar**, **M Vimala**, P Govindamoorthi, (2021), "An optimal weighted HEVC coding for video compression", Multimedia Tools and Applications (Springer US), Vol. 80, pp. 25389–25409. https://doi.org/10.1007/s11042-021-10828-w.
- Prabhakaran Narayanan, Sudhakar Sengan, Balasubramaniam Pudhupalayam Marimuthu, **Ranjith Kumar Paulraj**, (2021), "Novel collision detection and avoidance system for midvehicle using offset-based curvilinear motion", Wireless Personal Communications (Springer US), Vol. 119, pp. 2323–2344. https://doi.org/10.1007/s11277-021-08333-2.
- Prabhakaran Narayanan, Sudhakar Sengan, Balasubramaniam Pudhupalayam Marimuthu, **Ranjith Kumar Paulraj**, Cherry Bhargava, Pardeep Kumar Sharma, Kailash Kumar, Pankaj Dadheech, (2021), "Analysis and design of fuzzy-based manoeuvring model for mid-vehicle collision avoidance system", Journal of Ambient Intelligence and Humanized Computing (Springer Berlin Heidelberg), Vol. 12, pp. 9909–9922. https://doi.org/10.1007/s12652-020-02737-x.
- **S Thayammal**, R Jayaraghavi, S Priyadarsini, D Selvathi, (2021), "Analysis of Water Body Segmentation from Landsat Imagery using Deep Neural Network", Wireless Personal Communications (Springer US), pp. 1-16, https://doi.org/10.1007/s11277-021- 09178-5.
- **Renugadevi R**., Prakash J., Sakthivel B., Raj A.Y., (2021), "An IoT-based system for effective COVID patient health monitoring with SVM decision making", Turkish Journal of Physiotherapy and Rehabilitation, Vol. 32, No.3, pp. 3649-3653.
- V. Muthuvel Vijai., **Mathina. P.A**., (2021), "An Effective Ring Partition And Half toning Combined Face Morphing Detection", International Journal of Computer & Organization Trends (IJCOT), Vol.11, No.4, pp.10-14. https://doi:10.14445/22492593/IJCOT- V11I4P302.

Conference Paper Publications:

- **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 (IOP Publishing), Vol.1070, No.1,pp. 1-7 (012085). doi:10.1088/1757-899X/1070/1/012085.

- Sasireka Rajendran, **Vinoth Rathinam**, Sugumari Vallinayagam, and Vipin Kumar Sharma., "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.
- G Saranya, **R Vinoth**, B Vidhya, B Maruthi Shankar, N V Krishnamoorthy., "Smart System for Diagnosing and Monitoring Oral Diseases", Published in the IEEE 5th International Conference on Intelligent Computing and Control Systems (ICICCS), May 6-8, 2021. ISBN: 978-1-6654-1272-8, doi:10.1109/ICICCS51141.2021.9432355

International /National Conference Publications:

Name of the Author	Title	Name of the Conference
G Saranya **R Vinoth** B Vidhya B Maruthi Shankar N V Krishnamoorthy	Smart System for Diagnosing and Monitoring Oral Diseases	5th International Conference on Intelligent Computing and Control Systems (ICICCS) **ISBN N0.** 978-1-6654-1272-8
Sasireka Rajendran **Vinoth Rathinam** Sugumari Vallinayagam Vipin Kumar Sharma	Nano Biomaterials for Tissue Engineering Applications – Short Review	Fourth International Conference on Inventive Material Science Applications, doi:10.1007/978-981-16-4321-7
K Divya P Marichamy	A Novel Secure Testing Vlsi Circuits Using Puf Approximation.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
J Jothi Bala Saraswathi P Karuppasamy	Design Amd Performance Analysis Of Free Space Optical Link (Fso) Under Climatic Weather Conditions.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Karthick R Renugadevi	Hands –Off Toll Collection Based On Distance Travelled And Over Speed Tracking Using On Board Unit (Obu).	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)

S Kowsalya B Dhanam	Stack Based Configurable Logic Gates Technology For Hardware Security .	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
K Lakshmi S Balasubramanian	A Novel Woa Optimized Brain Tumor Segmention And Classfication Approach.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
A Malathi R Vinoth	Design and Implementation of Full Adder and Half Adder using 45nm Technology	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M Muruga Lakshmi S Thayammal	Ship Detection In Medium – Resolution SAR Images Using Segment.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Muruga Lakshmi P Ranjith Kumar	Tiling Based Concurrent Supervision Of Power And Fault Tolerance In Heterogamous Multicore Embedded Systems.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
V Muthuvel Vijai P A Mathina	Detection Of Face Morphing Attacks Based On Saliency Detection.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M Nandhini K Valarmathi	Improvement of Mental Stress Using Electroencephalogram Based On Optimized Convolutional Neural Network .	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M Nithya Kalyani P A Mathina	An Advanced Compressive Channel Estimation with Phase Noise In MIMO Systems.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
K Pavithira K Ramalakshmi	A Novel Approach For Liver Tumor Segmentation Using Deep RESUNET.	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Ponselvi P Marichamy	Mutli User Premption Aware Rank Offloading Scheduling In 5g Networks.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)

G Premalatha R Vinoth	Modified U NRT Based Retinal Vessel Segmentation Deep Learning Approach.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
P Satyapriya P Karuppasamy	PNN Based Tumor Identification In MRI Images.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Supraja P Ranjith Kumar	An Intelligent Traffic Signal Detection System Using Deep Learning.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
V Vijayalakshmi K Valarmathi	Predicting women Health Risk By Using Machine Learning.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
K P Yogalakshmi R Renugadevi	Energy Optimization Of Co-Operative Spectrum Sensing Scheme For Cognitive VANET Network.	National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
A Aishwarya J Chitra V Lavanya P Marichamy	Adaptive Cruise Control for Vehicle	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
N Monisha K Muthumari S Nivetha K Valarmathi	IoT BasedCovid-19 Safety for Indoor Monitoring System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
G Archana P Nandhini K Gowsalya P Karuppasamy	Kiosk for Temperature Measurement , hand disinfection and Face Recognition System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
K Kowsalya M Kanagalakshmi S Keerthana R Vinoth	Embedded System Based Automatic Home Appliances Control	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
V Keerthika P Dhanapriya S Anupratha R Renugadevi	Automatic Electricity Bill Generation & Cut-off System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)

S Kiruthika S Karthikailakshmi R Brindha K Ramalakshmi	IoT enabled Child Protection system	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
K M Karthikeswari K Mamthakrishnan A Andrine Dinola M Nithyasri	Night Vision Patrolling Robot using Arduino	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Anitha B Gayathiri C Lisharamya B Dhanam	Smart Cradle System for Infants using IoT	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
B Lalithambigai P Muthupreetha S Mareeswari P A Mathina	Library Management Applications	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
R Nagajothi M Muthulakshmi A Kavithalakshmi S Santhosh	Detection and Recording of Tremors on Parkinson's Patients	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
L Lakshmi Priya S Kayathiri N S Yoga Ananth	Design and Analysis of Textiles Based Flexible Wearable Antenna	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
P Archana V Deisirani A Madhumathy P Krishnaleela	Smart Walking Stick for Visually Impaired People	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M Dhayanithi M Marimuthu M Guruvignesh R Renugadevi	SPY Camera Robot ANDROID Application	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
J Kannan B Marimuthu K Gurunathan C Karthickprakash R Vinoth	Smart Power saving Management using GSM	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
A Gnanaprakashraj G Mariselvam K Nandhakumar P Kalaiselvam L Krishnakumari	Smart Irrigation System Using Rain Water Sensor	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)

T Dineshkumar A Marisankarraja S Atheishkumar S Mahalakshmi	ATM System using Hand Gesture	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Gukhalingam R Suresh S Balamurugan P Krishnaleela	IoT based Automatic control system for vehicle	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
R Swetha S Saranya K Packialakshmi K Valarmathi	Design and Implementation of Hand Trembling using IoT	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
P Priyanka P G Sowmiyaasri M Vijayachitra P A Mathina	Smart Notice Board using IoT	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Narmadha R Suguna M Yuvashree S Athimoolam	IOT Based Smart Incubator for Premature Baby	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M Yuvashree S Selvanandhini P Soundaryarani S Thayammal	Environmental Air Pollution Monitoring System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
G Sivaranjani V Sneha M Reshma M Indhumathi	IoT Based Paralysis Patient Healthcare System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
K Nandhini R Sabeetha S Sridevi S Mahalakshmi	Electricity Theft Identification System Using IoT	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Selvalakshmi V Srilekha P Subalakshmi M Rajkumari	Home Automation Using Telegram	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M R Suvetha G Veni M Suguna B Dhanam	Smart School Bus Monitoring System using IoT	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)

S Padmavathy B Ranjitha S Suvitha S Balasubramanian	Arduino Based 3D Printer with Effective Control Embedded System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Sathiyapriya P Priyanga G Pandeeswari S Thayammal	IoT Based Weather Monitoring System for climate change sustainability	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
R Vijay Prakash S Vairamuthu P Srinivas G Lingasamy	Object Carrying Robots	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S M Srikkanth E Sunil S Satheesh Kumar N S Yoga Ananth	Design and Implementation of Student Educational System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Rajkumar N Premkumar M Naveenkumar S Balasubramanian	IoT based Baby monitoring System	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
M Petchi Muthu B Sankar Ganesh V Premkumar P Karuppasamy	Food Monitoring System using IoT	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
L S Surya Prakash P Senthurpandi M Sheik Bathusha G Lingasamy	Campus Requirement System Using PHP	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
S Vijay Kumar K Vignesh N Naveen Babu P Ranjith Kumar	Mine Metal Detector Robot	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)
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 (IOP Publishing)
K Palanimurugan V Vinoth G Lingasamy	Healthcare Monitoring System Using IoT with Smart Sensors	Proceedings of the National Conference on Recent Innovations in Science & Engineering (RISE – 2021)

FDP/ Workshop / Seminar Attended:

Name of the Faculty	Title of the Course	Date (From-To)
Dr. Ranjith Kumar P	FDP On AI And ML Using Python, Finland Labs	03.05.2021 to 14.05.2021
	FDP On IOT Using Amazon AWS, Finland Labs	17.05.2021 to 28.5.2021
Dr.R. Vinoth	ATAL FDP On Server Less Iot For Societal Products, IIIT, Kottayam.	24.05.2020 to 28.05.2021
Mr S. Balasubramaniam	FDP On Trends And Challenges In Machine Learning And Deep Learning	10.05.2021 to 01.05.2021
Dr.R. Renugadevi	FDP On Trends And Challenges In ML And DL	10.05.2021 to 21.05.2021
	Recent Trends In Wireless Communication And 5G Technology- FDP On Narasu's Sarathy Institute Of Technology	24.05.2021 to 28.05.2021
Mr. N.S .Yoga Ananth	FDP On E- Contents And ICT Tools For Innovative Teaching & Learning	01.05.2021 to 07.05.2021
Mr.G.Lingasamy	ATAL FDP On Inculcating Universal Human Values In Technical Education	03.05.2021 to 07.05.2021
Mrs.P.A.Mathina	ATAL FDP On IOT	04.01.2021 to 08.01.2021
	FDP on Electric Vehicle Evolution impact on power grid	19.04.2021 to 24.04.2021
	FDP on Trends and Challenges in ML &DL	10.05.2021 to 21.05.2021
	STTP under AICTE-AQIS on Smart Sustainable Farming based on IOT Perspective	17.05.2021 to 22.05.2021
	FDP on Digital Image Processing	24.05.2021-28.05.2021
Mrs. .M.Vimala	Trends and Challenges on ML and DL-FDP-Easwari Engineering College	10.05.2021-21.05.2021
Mrs.P.Krishnaleela	ATAL FDP on IOT	04.01.2021 to 08.01.2021
	FDP on Digital Image Processing	24.05.2021 to 28.05.2021
Ms.M. Indhumathi	STTP on Smart Sustainable farming based on IoT at SIT, Kariyapatti	24.05.2021 to 29.05.2021
	FDP on Design of Nano electronics and Nano photonics using advanced	26.04.2021 to 08.05.2021
	Software tools at GITA college, Bhubaneswar	24.05.2021 to 28.05.2021
Mrs.S.Mahalakshmi	FDP on Digital Image Processing	24.05.2021 to 28.05.2021
Ms. M.Rajkumari	FDP on the Design of Nano electronics and Nano photonics using advanced software tools.	26.04.2021 to 08.05.2021
	FDP on Trends and Challenges in ML and DL.	10.05.2021 to 21.05.2021
	FDP on Recent trends in Wireless Communication and 5G technology	24.05.2021 to 28.05.2021
Mrs.B.Dhanam	NITTTR - Cryptography for network security	03.05.2021 to 07.05.2021

	Trends and challenges in Machine learning and deep learning-FDP on Easwari Engineering College.	10.05.2021 to 21.05.2021
Ms. S.Anusankari	ATAL FDP on Wearable Devices	01.02.2021 to 05.02.2021
	ATAL FDP on IoT & Its Applications	28.04.2021 to 04.05.2021
	FDP on E-Contents and ICT Tools for Innovative Teaching and Learning.	01.05.2021 to 07.05.2021
	ATAL FDP on Inculcating Universal Human Values in Technical Education	03.05.2021 to 07.05.2021
	FDP on Modern Techniques for Wireless Communication1	17.05.2021 to 21.05.2021
Mr. S.Santhosh.	ATAL FDP on Block chain	04.01.2021 to 08.01.2021

Mr.S.Sankar Ganesh	ATAL FDP on Internet of Things	23.02.2021 to 27.02.2021
	STTP on Machine Learning Applications to IOT	01.03.2021 to 06.03.2021
	System on chip design using EDA tools	18.03.2021 to 20.03.2021
	ATAL FDP on Cyber Security	22.03.2021 to 26.03.2021
	NITTTR FDP on Antenna and Wireless Communication technologies for IOT	26.04.2021 to 30.04.2021
	NITTTR FDP on Recent Technologies for Mobile broadband transformation	17.05.21 to 21.05.21
Ms. M.NidhyasrI	E-Contents and ICT Tools for Innovative Teaching & Learning, FDP-RCP.	01.05.2021 to 07.05.2021
	ATAL FDP on Modern Techniques for Wireless Communication	17.05.2021 to 21.05.2021
Ms. J.Megala	ATAL FDP on Wearable Devices	01.02.2021 to 05.02.2021
	FDP on IoT & Its Applications	28.04.2021 to 04.05.2021
	E-Contents and ICT Tools for Innovative Teaching & Learning, FDP-RCP, Roorkee	01.05.2021 to 7.05.2021
	ATAL FDP on Inculcating Universal Human Values in Technical Education	03.05.2021 to 07.05.2021

STUDENT CORNER

Achivements:

Name of the Student	Nature of the Event	Title of the Event	Period/ Date	Organized by	Awards
K.Sreenidhi	Online Course	Introduction to the Internet of Things	Dec 2020	Gyanamite Edtech Pvt Ltd, Bangalore	The Most Curious Learner
G Sathya Sree P.Vinothini L.Prasanthini	Project Contest	Night Vision Patrolling using Arduino	Jan 2021	TNSCST	Finalist Rs. 7500/- Amount Sanctioned

AICTE Vishwakarma Award :

Name of the Student	Title of the Project	Guided By
N Monisha K Muthumari S Nivetha	Driverless Car using Arduino	Dr.K.Valarmathi
P Muthu Preetha S Mareeswari B Lalithambigai	Trendo Automation in Hospital	Dr.P.Karuppasamy
G Archana P Nandhini	Harvest Natural and Artificial Light using Solar cell	Dr.R.Vinoth
M Petchi Muthu A Mari Shanker Raja B Sankar Ganesh	Agribee	Dr.P.Karuppasamy
R Vijay Prakash P Srinivas S Vairamuthu	Sila Battery for Industrial Applications	Dr.R.Vinoth
S Balamurugan S Gukhalingam M Guruvignesh	Health Care	Dr.P.Karuppasamy
A Madhumathi M Muthulakshmi	Industry 4.0	Dr.R.Vinoth
V Vidhyasri S Srivathsala M Varshini	Smart City	Dr.K.ValarmathI
P Srinivas R Vijay prakash S Vairamuthu	Smart City	Dr.P.Karuppasamy
K Kowsalya M Kanagalakshmi	Agriculture	Dr.R.Vinoth
S Kayathri L Lakshmipriya	Smart City	Dr.K.Valarmathi

प्रतिभागिताप्रमाण पत्र
अभातशिप क्षेत्रीयस्तर
छात्र विश्वकर्मा पुरस्कार
2020
विजयप्रकाश
VS2K17,पी.एस.आर. अभियांत्रिकीमहाविद्यालय,तमिलनाडु
को "आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविद महामारी के पश्चात भारतीय अर्थ व्यवस्था में सुधारप्राप्ति हेतु पलायन प्रतिभाएँ एवं पुनर्वास योजना" विषय के अंतर्गत "और कोई अन्य आवश्यक समर्थन" श्रेणी में "सिलाबैटरी" प्रोटोटाइप/अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation
AICTE Regional Level
Chhatra Vishwakarma Awards 2020
VIJAY PRAKASH
VS2K17, P.S.R.ENGINEERING COLLEGE, Tamil Nadu
is hereby awarded with **Participation Certificate** in the category **"And any other necessary support"** for presenting a prototype/ innovative solution of **"SILA BATTERY"** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat"**

ANIL D SAHASRABUDHE Chairman
M P POONIA Vice Chairman
RAJIVE KUMAR Member Secretary

प्रतिभागिताप्रमाण पत्र
अभातशिप क्षेत्रीय
छात्र विश्वकर्मा पुरस्कार
2020
अर्चना जी
पी.एस.आर. अभियांत्रिकीमहाविद्यालय,तमिलनाडु
को "आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविद महामारी के पश्चात भारतीय अर्थ व्यवस्था में सुधारप्राप्ति हेतु पलायन प्रतिभाएँ एवं पुनर्वास योजना" विषय के अंतर्गत "आत्मनिर्भर भारत के मिशनको प्राप्त करने के लिए सूक्ष्म, लघु और मध्यम उद्यमों को बढ़ावा देना" श्रेणी में "सौरसेलकाउपयोगकरकेप्राकृतिकीरकृत्रिमप्रकाशकोइकट्ठे" प्रोटोटाइप/अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation
AICTE Regional Level
Chhatra Vishwakarma Awards 2020
Archana G
Opal, P.S.R.ENGINEERING COLLEGE, Tamil Nadu
is hereby awarded with **Participation Certificate** in the category **"Promote micro, small and medium enterprises to achieve the mission of Atmanirbhar Bharat"** for presenting a prototype/ innovative solution of **"Harvest natural and artificial light using solar cell"** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat"**

ANIL D SAHASRABUDHE Chairman
M P POONIA Vice Chairman
RAJIVE KUMAR Member Secretary

Workshop / Seminar Attended:

Name	Place of the Event	Date	Title of the Event
K.Sreenidhi	Gyancast	01.01.2021	Introduction to the Internet of Things
K.Sreenidhi			
R.Deepika			
P.Dhanalakshmi			
R.Dharmalakshmi			
M.Dharshini			
M.Esakkimuthu			
K.Haridineshkumar			
N.Jeyashree			
B.KaliSatheesh			
S. Keerthana			
P.Kokila			
M.Mahendrakumar			
K.MalaDhanalakshmi			
M.Manojkumar			
M.MariSelvam			
A.MohamedUshman			
M.Muneeswari			
S.Nandhini Devi			
S.Navina			
M.Nivethika			
A.Parthsarathy			
C.Petchimuthu			
V.Pragatheeswari			
P.Prathika			
M.G. Ragamathi			
P.Sankareswari			
B.Sathees Kumar			
U.Sathya			

S.Sneha			
K.Sreenidhi			
S.Subalakshmi			
G. Subaash			
S. Thamarai Chandra			
P. Yogiramji			
T.AnanthaBalan	Cisco Networking Academy	01.01.2021	Introduction to Cybersecurity
SangeethaSelvaraj			
A.Mohamedushman		02.01.2021	
S.Subalakshmi	Coursera	03.01.2021	Initiating and Planning Projects
S.Priyadharshini	Udemy	04.01.2021	Internet and web Development Fundamentals
			Python 3 for Absolute Beginners
			Learn to Code with Python 3
			Python for Complete Beginners Bootcamp
			Python for Beginners: Introduction to Python
			Digital Electronics Made EASY-Boolean algebra till FSMs
			Project Development using JAVA for beginners
			How to become a Chief Information Security Officer
			Learn 47 Different Ways to Make Money
			Goal Setting For Success: Plan and Achieve Your Goals
S.Sangeetha	Coursera - University of California, Irvine	05.01.2021	Introduction to the Internet of Things and Embedded Systems
R.Sowmiya	Udemy	07.01.2021	Deep Web- The complete Introduction to the hidden web
R.Sowmiya		07.01.2021	Modern Multi Vendors E-Commerce Store In PHP
R.Sowmiya		07.01.2021	Learn HTML- For Beginners
R.JoelJesbert	Automation Anywhere	08.01.2021	Getting Started with Robotic Process Automation
M.Aarthi	Ramco Institute of Technology, Rajapalayam	08.01.2021	Workshop titled IoT using Raspberry Pi for Beginners
T.Ananthabalan			
M.Bala Krishna Prakash			
B.KaliSatheesh			
M.Kaviarasan			
S.Keerthana			
M.Mahendrakumar			
A.Mohamedushman			
M.Muneeswari			
M.Nivethika			
V.Pragatheeswari			
P.Prathika			
P.Priya			
P.Priyadharshini			
M.G.Ragamathi			

B.Sathees Kumar U.Sathya R.Sowmiya			
R.JoelJesbert P. Priyadhrasini	Cisco Networking Academy	09.01.2021	Introduction to Cybersecurity
M.Kaviarasan M.Kaviarasan	Ramco Institute of Technology, Rajapalayam	12.01.2021	Webinar titled Basic and Recent Trends in R@AC
R.Deepika P.Dhanalakshmi S.Gokila P.Kokila P.Yogiramji R.Dharmalakshmi	Symposium	14.01.2021	Symposium
P.Priyadharshini	Cisco Networking Academy	16.01.2021	Introduction to Cybersecurity
M.Jeya jothi	My Gov	30.12.2020	Farmers First Quiz Constitution Quiz
R.Sowmiya	My Gov Manipur.		Kisan Diwas Quiz
P.Kokila	Tamil Nadu State Aids Control Society (TANSACS),		State level Online QuizCompetition on HIV/AIDS & STI and Covid-19 pandemic
K.Mala Dhanalakshmi	Tamil Nadu State AidsControl Society (TANSACS),		State level Online Quiz Competition on HIV/AIDS & STI and Covid-19 pandemic
K.Mala Dhanalakshmi	My Gov		Participated in the Gender Sensitization & Legal Awareness Quiz
N.Vaikunda Muthu R.Sowmiya B.Sathees Kumar S.Nandhini Devi	Microsoft Classroom Series in AI	21.12.2020	Microsoft

Corportate/Industry Certificate Courses completed by the Students:

Name of the Student	Title of the Event	Date	Name of the Organization
III Year ECE	Project-Based Learning in Embedded systems using IT Platform	June 2020-May 2021	EdGAte- Texas Instrument
G.Subhaash B.Sathees Kumar Muthukarthika M Nandhini M Nandhinidevi S Naveen G Navina S Nivetha K Nivethika M Palanikumar V Parthasarathy A Petchimuthu C	Distribution of Open VINO Tool kit	20.03.2021	Intel

	Pon Karthick Prabu K				
	Pragatheeswari V				
	Prakash Raja T				
	Prathika P				
	Priya Dharshini P				
	Sathya U				
	S. Thamarai Chandra	Python 101 for Data Science	Jan 2021	IBM Skill Developer	
	P. Yogiramji				
	M.Esakkimuthi				
	Mahendrakumar M				
	Mahendran S				
	Mala Dhanalakshmi K				
	Mallapparaju M				
	Manjunaathaa S S				
	Manobalan P				
	Manojkumar M				
	Mareeswaran G				
	Mariselvam M				
	Mohamed Ushman A				
	Muneeswari M				
	Muthukarthika M				
	Nandhini M				
	Nandhinidevi S				
	Naveen G				
	Navina S				
	Mahendrakumar M				
	Mahendran S				
	Mala Dhanalakshmi K				
	M.Aarthi	Introduction to the Internet of Things	Dec 2020	Gyanamite Edtech Pvt Ltd, Bangalore	
	M.Bala Krishna Prakash				
	K.Sreenidhi				
	R.Deepika				
	P.Dhanalakshmi				
	R.Dharmalakshmi				
	M.Dharshini				
	M.Esakkimuthu				
	K.Haridineshkumar				
	N.Jeyashree				
	B.KaliSatheesh				
	S. Keerthana				
	P.Kokila				
	M.Mahendrakumar				
	K.MalaDhanalakshmi				
	M.Manojkumar				
	M.MariSelvam				
	A.MohamedUshman				
	M.Muneeswari				
	S.Nandhini Devi				
	S.Navina				
	M.Nivethika				
	A.Parthsarathy				
	C.Petchimuthu				
	V.Pragatheeswari				
	P.Prathika				

M.G. Ragamathi P.Sankareswari B.Sathees Kumar U.Sathya S.Sneha K.Sreenidhi S.Subalakshmi G. Subaash			
P.Priyadharshini R.Joel Jesbert A.Mohamedushman T.Anantha Balan SangeethaSelvaraj M Bala Krishna Prakash S.Kali Krishna M Raja Durai	Introduction to Cybersecurity	Dec 2020	Cisco Networking Academy
S Bharathi	Cybersecurity Essential		
S Bharathi	Introduction to Packet Tracer		

National/International Conferences:

Name of the student	Title of the paper	Date	Title of the conference
B.Lalithambigai R.Nagajothi P.Dhanapriya	Integrating Arduino based Educational mobile robots in ROS	01.03.2021	Presented in ISTE sponsored National Conference on NC^2E^2 at P.S.R. Rengasamy College of Engg for women
P.Nandhini	Paper Presentation - Mixed reality		
B.Gayathri S.Anitha P.Muthupetchi S.Mareeswari	Paper Presentation - 3D Password		
P.Archana V.DaisyRani A.Madhumadhi	Paper Presentation - IoT based Home Automation Control System using Raspberry Pi		
A.KavithaLakshm M.Muthulakshmi	Paper Presentation - Wireless Communication		
C.LishaRamya K.Gowsalya S.Kiruthika	Paper Presentation – Blue Eye Technology		
G.Archana A.Aishwarya	Paper Presentation - Paper Battery		
V.Lavanya J.chitra	Paper Presentation - Li-Fi Technology		

NPTEL & Coursera Certificate Courses completed by the Students:

Name of the Student	Nature of the Event	Title of the Event	Date	Awards/ Participation
S.Sangeetha	**Courseera**	Introduction to the Internet of Things and Embedded Systems	Jan 2021	Course Completed
C.Petchimuthu		Machine Learning Foundations : A Case study Approach		
S.Subalakshmi		Initiating and Planning Projects		

Placement Details

Placed Students:

Name of the student	Name Of the Company
M.Yuvashree	Syrma technology pvt Ltd
R.Suresh	Hradi Infotech
S.Narmadha	Tessolve Semiconductor Pvt Ltd
B.Ranjitha	Rising Stars Mobile India Private Limited
S.Saranya	
S.Suvitha	
R.Swetha	
E.Sunil	Vijay Flexi Packaging Industries
P.Nandhini	Chain-Sys (India) Pvt Ltd
S.Anuprathaa	MMC Infotech Services Pvt Ltd.
R.Brindha	
V.Daisy Rani	
B.Gayathri	
K.Gurunathan	
S.Karthigai Lakshmi	
K.M.Karthikeswari	
S.Kiruthika	
S.Mareeswari	
M.Suguna	
S.Keerthana	
R.Naga jothi	
S.Sathya Priya	
S.Anitha	Sakthi Auto Component Limited
P.Archana	
S.Athees Kumar	
S.Balamurugan	
P.Dhanapriya	
M.Dhayanithi	
T.Dineshkumar	
A.Gnana Prakashraj	
K.Gowsalya	
S.Gukhalingam	
M..Kanagalakshmi	
J.Kannan	
A.Kavithalakshmi	
V.Keerthika	
K.Kowsalya	
A.Madhumathi	
K.Mamthakrishnan	
M.Marimuthu	
G.Mariselvam	
N.Monisha	
K.Muthu Mari	
M.Muthulakshmi	
K.Nandhakumar	
M.Guruvignesh	
N.Naveen Babu	
M.Naveenkumar	
S.Padmavathy	
K.Palanimurugan	

G.Pandeeswari
V.Premkumar
S.Rajkumar
R.Sabeetha
B.Sankar Ganesh
S.Satheesh Kumar
S.Selvalakshmi
P.Senthurpandi
M.Sheik Bathusha
G.Sivaranjani
G.Sowmiyaasri
M.Srikkanth S
V.Srilekha
P.Subalakshmi
R.Suguna
S.Vairamuthu
K.Vignesh
M.Vijayachitra
V.Vinoth

ALUMNI CORNER

Mr.J.Vignesh
Lead AI Scientist,
Target Corporation India Pvt. Ltd.,
Bangalore – 560045.

Dear ECE Dept,

"I am so grateful to have had the opportunity to study here at PSR Engineering College. The coursework was challenging, but it prepared me well for my career. The skills and knowledge I gained during my time in the department have been invaluable in my professional life. I have been able to apply what I learnt to a variety of projects and tasks, and it has helped me stand out in my field. I have no doubt that the department will continue to produce top-notch professionals who will make a real impact in their respective industries. All the best and thank you for everything!"

Lahooth Vashique Imrahn
Seller Partner Senior Associate
Amazon Development Centre
Bagmane Tech Park,
Bangalore.

Hi

To all the staffs who remember me and who are newly appointed after our passed out batch

I am lahooth who studied in ECE department batch 2010-2014

At first I joined the college with a blank mind. I have no idea what i am gonna learn from the college what i am gonna do after completing my degree but the college taught me that how to survive in a workplace by giving me enough knowledge and life lessons. The staffs sculpted me either in both ways (strict and lineant) way that i have to study what they are teaching me so that in future we won't be in any sort of trouble when we are getting adapted to a work culture

And here i am now working in Amazon development center banglore as an senior associate in SPS .The

staffs and the college plays an huge part of who i am now

Thanks for the staffs and college members who made me as a successful person

Thanks & regards

STUDENT CORNER

Article

A low-cost smart light system

This project describes the simple design of low-cost smart light system. Reducing energy and demand in the residential and industrial sectors is an important challenge worldwide. In particular, lights account for a great portion of total energy consumption, and unfortunately a huge amount of this energy is wasted. Light-emitting diode (LED) lights are used in offices, houses, industries more efficiently than traditional lights. Moreover, the light control systems are introduced to current markets, because the installed lighting systems are outdated and energy inefficient. Due to high costs, installation issues, and difficulty of maintenance; existing light control systems are not successfully applied to house, office, and industries. It describes a low cost, wireless, easy to install, adaptable, and smart LED lighting system to automatically adjust the light intensity to save energy and maintaining user satisfaction. The system combines the transistor, LDR and resistor in a low-power solution. This project describes the design and implementation of the proposed system in a real-world deployment.

Expected Outcome:

- It will be operated in low power even through it provides desired output based on the application.
- With the help of this design is required low power to provide the sufficient energy to operate or control the application.

Tools used:

- LED bulb
- Transistor 2222A
- 1K resistor
- LDR
- Battery holder
- Battery
- Wire (required)

- Measurements of total power consumption over a continuous six months period (winter to summer) of a busy office were acquired to verify the performance and the power savings across several weather conditions scenarios.
- The proposed smart lighting system reduces total power consumption in the application scenario by 55% during a six-month period and up to 69% in spring months.

Detailed Project proposal:

•LED:

An LED bulb produces light by passing the electric current through a semiconducting material –

the diode, which then emits photons (light) through the principle of electroluminescence. Don't let that big word scare you! ... In contrast, an incandescent light bulb works by passing electricity through a small wire, or filament.

•Transistor(2222A):

A transistor is a semiconductor device used to amplify or switch electronic signals and electrical power. Transistors are one of the basic building blocks of modern electronics. It is composed of semiconductor material usually with at least three terminals for connection to an external circuit. Here we use the A2222 transistor and it is a PNP Bipolar Transistor (-50V, -10A).

•Resistor:

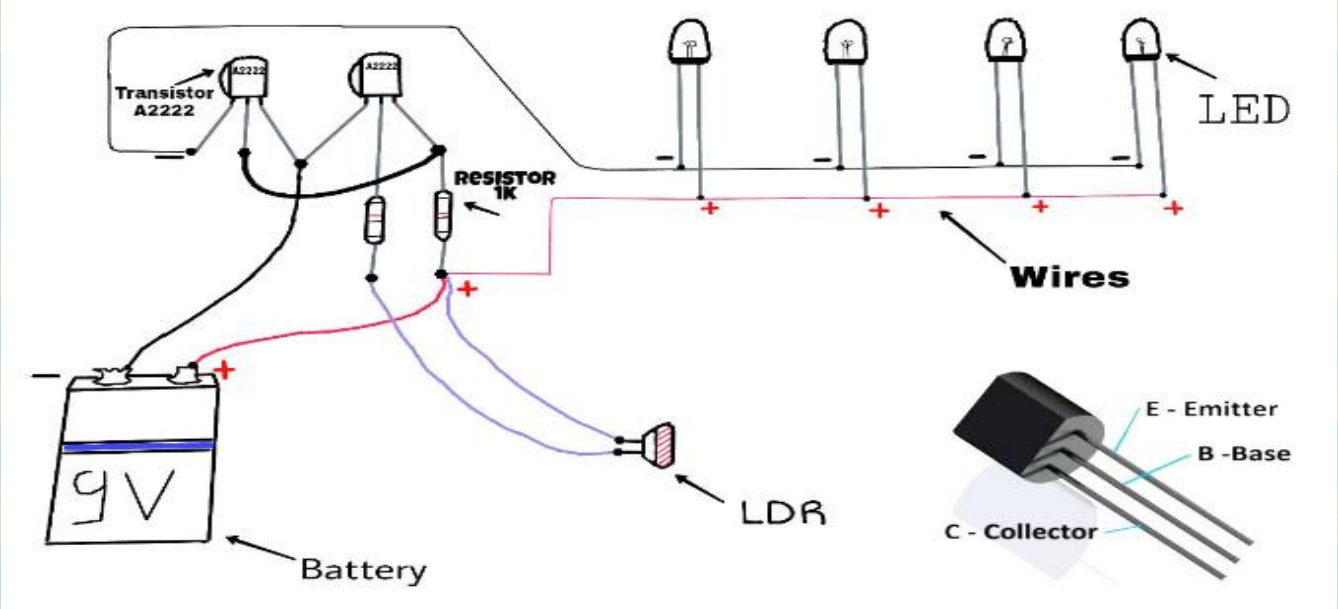
A passive electrical component with two terminals that are used for either limiting or regulating the flow of electric current in electrical circuits. The main purpose of resistor is to reduce the current flow and to lower the voltage in any particular portion of the circuit. It is meant to pull the base of the transistor to a known state (ground) when the control signal is missing/open/high input.

•LDR:

A photoresistor is also known as a light-dependent resistor, LDR, or photo-conductive cell is a passive component that decreases resistance with respect to receiving luminosity (light) on the component's sensitive surface.

Working:

With the help of the circuit diagram, we can make the circuit diagram connection.When the power is supply to the circuit, the transistor act as a switch. When the LDR detect any light signal, the LED will be switched off. If the LDR doesn't detect any light signal, the LED will be glow. Here we need less power supply, so we can use the 9V battery.This project will be switch off on the day time and it is switched on in the night time.



Yogiramji.P(19EC118)
II ECE

SOLAR POWER BASED AUTOMATIC DRIP IRRIGATION SYSTEM

Most of the worldwide available water resources is used in agriculture, around 85% and this percentage will not decrease soon keeping in mind the rate of population growth, leading to high demand of food. Its already high time to create and implement new methodologies using smart technologies for sustainable agriculture. In our country Agriculture is major source of food production to the growing demand of human population. In agriculture, irrigation is an essential process that influences crop production.

Generally farmers visit their agriculture fields periodically to check soil moisture level and based on requirement water is pumped by motors to irrigate respective fields. Farmer need to wait for certain period before switching off motor so that water is allowed to flow in sufficient quantity in respective fields. This irrigation method takes lot of time and effort particularly when a farmer need to irrigate multiple agriculture fields distributed in different geographical areas. To overcome the wastage of water we have introduced Solar Powered Automatic Drip Irrigation System for smarter irrigation. It is the combination of two major efficient irrigation methods, automated irrigation as well as Drip Irrigation. Automated Irrigation System will regulate water flow in soil without much human intervention, while maintaining moisture of the plants. Saving water and electricity for the future is a challenging task for farmer and landlords. We have used solar panel and battery to provide water at the right time to the crops. Solar panel converts the heat energy into electrical energy. It serves to overcome the effect of the power supply failures. The battery supplies the electrical energy to the system in case of power failure. Thus, our system provides an uninterrupted power supply, timely deliver, and right amount of water to the crops and plants.

Solar powered drip irrigation system is a micro irrigation system that saves water and nutrients by allowing water to slowly drip to the roots of plants and minimize water evaporation by using indigenous resources like photovoltaic energy. Drip irrigation methods that have a significant impact on resource savings like saving in energy, labor cost and less use of water, improve crop yields and farmer profit.

EXISTING SYSTEM

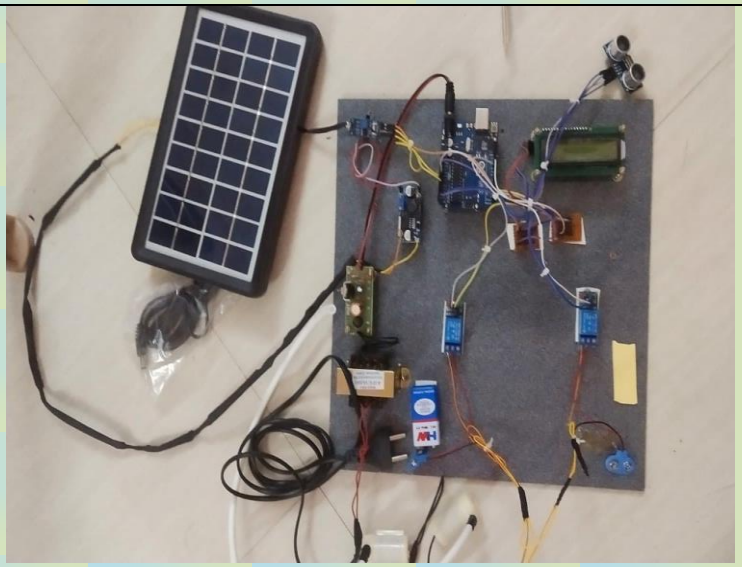
The irrigation system is defined as a system that distributes water to targeted area. There are many other types of irrigation system all over the world but these irrigations are encountering many problems. The automation plays an important role in the world economy therefore ,engineers struggle to come out with combined automatic device in order to create complex system that help human in its activities so that the system automatically process itself without any human intervention so we would like to developed automatic irrigation system.

PROPOSED SYSTEM

In the existing system a pinch of energy efficiency methods and lacking. Hence making the system more efficient towards the use of energy as well as maximum optimization in minimum use of water resource brings out the keen objective of this project. Maximizing the possibilities of agriculture in areas with less water abundance and automation. Thus maintaining proper amount of water level in the soil is one of the necessary requirements to harvest a good crop that can be a source of various types of nutrients whether micro or macro for their proper growth.

HARDWARE REQUIREMENTS

- Arduino Uno Board
- Power supply board
- Solar panel
- Soil moisture sensor
- Ultrasonic sensor
- Relay board
- DC Water pump
- LCD Display 16X2



By
C.Petchimuthu
IV year ECE

Focus on education is a big strength. I want to see young people focus on creativity and take more risks.

- Sundar Pichai