# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING BITS & BYTES



Volume III, Issue 4, April – June 2021

# **Department of Electronics and Communication Engineering**

## **Faculty Publications – Journal**

 R.Bhuvaneswari, S. Ganesh Vaidyanathan, "Transgender Face Recognition using ROI based Convolutional Neural Network", International Journal of Computer Applications, Volume 183, Number 8: Pages 1:4, June 2021. Doi: 10.5120/ijca2021921360. ISBN No: 973-93-80901-90-3.

2. Sherin Shibi & R.Gayathri, "A New Methodology for Unsupervised Feature Learning in Hyperspectral Imagery using Deep Belief Network Current Science", VOL. 120, NO. 11, 10 JUNE 2021, ISSN 0011-389.

3. **S. Gopinath, P. Ashok, M. Ganesh Madhan,** "Performance evaluation of free space optical link driven by gain switched temperature dependent quantum cascade lasers, Laser Physics Letters", IOP Publishing, Astra Ltd, Volume 18, Issue 6, April 2021, Pages 1-5, April 2021.

4. **B.Sarala, Dr.G.A.Sathishkumar**, "Efficient Design of Image Cipher Technique using Reversible logic Turkish Journal of Computer and Mathematics Education", Volume 12, Issue No-13,June 2021,Page-691-700 June 2021.

5. **R.Kousalya, Dr.G.A.Sathish Kumar,** 'Security Analysis against Differential Cryptanalysis using Active S-Boxes Turkish Journal of Computer and Mathematics Education', Vol.12 No.13, 701-709 June 2021.

## **Faculty Publications – Conferences**

1. B.Khushbookumari, Mary Sharon.C.S, P.Muthulakshmi.P, B.Sarala "**Design of Substitution box** for cryptography using Gaussian distribution" NCSPCN-2021 SVCE, Department of ECE, Sri Venkateswara College of Engineering on 7th May 2021.

2. Sairam.K, Saranya.K, Shruti Sharada S, B.Sarala "A Lightweight Hybrid encryption algorithm-SEPAR" NCSPCN-2021 SVCE Department of ECE, Sri Venkateswara College of Engineering on 7th May 2021.

3. **G. Aswini, G. Gajalakshmi, J.N. Jayashree, R.Kousalya**, "Design of high speed and area efficient adder", NCSPCN-2021SVCE Department of ECE, Sri Venkateswara College of Engineering on 7th May 2021.

4. Siddharth J, Varun Tadimeti, Yashwant Sakala, R.Kousalya, "Design of High-speed Data Transmission using LiFi" NCSPCN-2021 SVCE, Department of ECE, Sri Venkateswara College of Engineering on 7th May 2021.

5. Kaushik G.V., Giridaran S., Reddy G.N.L., Sathish Kumar G.A., Jeyaprabha T.J., and R. Kousalya, "A Secret Key Generation Using Double chaotic Maps and Hash Algorithms for Image Encryption", International Conference on Power of Digital Technologies in Societal Empowerment IETE chencon 2021, IETE Chennai on 4 & 5 June 2021.

6. G.A.Sathish kumar, Guda Venkata Kaushik, Giridaran S, G Naga Lohith Reddy, Jeyaprabha.T.J and R.Kousalya, "A Sceret Key Generation Using Double chaotic Maps and Hash Algorithms for Image Encryption", International Conference on Power of Digital Technologies in Societal Empowerment IETE chencon 2021 IETE, IETE Chennai 4 & 5 June 2021.

#### **Faculty Achievements:**

Received most Active IETE Students Forum - Special ISF Award for was announced by IETE Chennai Center for the period 2019-20 during 31st Annual General Body Meeting of IETE-Chennai Center held on June 26th 2021.

Dr.S.Ganesh Vaidyanathan, Prof. Received Best Paper Award for the paper titled "First Response Drone" presented in the International Conference on Power of Digital Technologies in Societal Empowerment - IETE CHENCON 2021 organized by IETE Chennai Centre during June 4 & 5, 2021. June 4 & 5, 2021

DrG.A.Sathishumr, Prof. Mrs.T J.Jeyaprabha, AP Mrs.R.Kousalya AP, Received Best Paper Award for the paper titled A Secret Key Generation using Double Chaotic Maps and Hash Algorithm for Image Encryption during the International Conference on Power of Digital Technologies in Societal Empowerment – CHENCON 2021 organized by the Department of IETE-Chennai Center June 4 & 5, 2021.

Dr.G.Padmavathi, Prof. Mrs.T.J.Jeyaprabha, AP, Received Best Paper Award for the paper titled Digital Signature Verification for Cloud Storage using ECC during the International Conference on Power of Digital Technologies in Societal Empowerment – CHENCON 2021 organized by the Department of IETE-Chennai Center, June 4 & 5, 2021

Dr.S.R.Malathi, Associate Professor Ms.S.Kalyani, Ms.S.M.Mehzabeen Assistant Professor from ECE department, have completed the "e-Yantra Task Based Training Programme (e-Yantra TBT)" successfully and received the "Class B Completion Certificates".

#### **Books Published**

**Mr.Guda Venkata Kaushik, Mr.Giridaran S, Mr.G Naga Lohith Reddy**, received Best Paper Award for the paper titled Digital Signature Verification for Cloud Storage using ECC during the International Conference on Power of Digital Technologies in Societal Empowerment – CHENCON 2021 organized by the Department of IETE-Chennai Center on 4<sup>th</sup> and 5<sup>th</sup> June 2021.

**Dr.Sutha Senthil**, Mr.Ravi K.R., A brief review on self-cleaning coatings for photovoltaic systems New Research Directions in Solar Energy Technologies; eBook ISBN: 978-981-16-0594-9; doi: 10.1007/978-981-16-0594-9. May 2021

Mrs.T. J. Jeyaprabha, Dr.G. Sumathi, D. Sneha, C. Reshma, K. S. Sai Nykhil, Wi-Fi Based Solar Plant Monitoring System/ Book Chapter New Approaches in Engineering Research Vol. 3, Chapter 9, 21 June 2021, Page 116-133. Print ISBN: 978-93-91312-84-8, eBook ISBN: 978-93-91312-89-3 https://doi.org/10.9734/bpi/naer/v3/9974D JUNE 2021

**Mrs.T. J. Jeyaprabha**, Dr.G. Sumathi, S. Ahila, S. Deepika, P. Jaya Varshini JUNE 2021, New Approaches in Engineering Research Vol. 1, Chapter 10, 24 June 2021, Page 138-148. Print ISBN: 978-93-91215-62-0, eBook ISBN: 978-93-91215-70-5 <u>https://doi.org/10.9734/bpi/naer/v1/9767D</u>.

#### **Students Publication:**

1. **Mr. J Vijay Soorya, Mr. P S Sanjay, Mr. K Sathappan,** Final year ECE students, published paper titled "Network-on-Chip for Low Power MAP Decoder Using Folded Technique and CORDIC Algorithm for 5G Network" during 2021.

2. **Mr.Kumaran S V, Mr.Premraj S, Mr.Lokesh S,** received Best Paper Award for the paper titled "First Response Drone" presented in the International Conference on Power of Digital Technologies in Societal Empowerment - IETE CHENCON 2021 organized by IETE Chennai Centre during June 4 & 5, 2021.

3. **Mr.Kaushik G.V., Mr.Giridaran S., Mr.Reddy G.N.L.** received Best Paper Award for the paper titled "A Secret Key Generation using Double Chaotic Maps and Hash Algorithm for Image Encryption" during the International Conference on Power of Digital Technologies in Societal Empowerment – CHENCON 2021 organized by the Department of IETE-Chennai Center on 4<sup>th</sup> and 5<sup>th</sup> June 2021.

4. Mr.Guda Venkata Kaushik, Mr.Giridaran S, Mr.G Naga Lohith Reddy, received Best Paper Award for the paper titled Digital Signature Verification for Cloud Storage using ECC during the International Conference on Power of Digital Technologies in Societal Empowerment – CHENCON 2021 organized by the Department of IETE-Chennai Center on 4<sup>th</sup> and 5<sup>th</sup> June 2021.

Mr Karthik Rajagopal of third year ECE published paper titled, A Novel System of Alerting Electric Leaks in Transmission Poles Using Smart Digital Systems in International Journal for Research in Engineering Application & Management (IJREAM) during 2021.

Mr Vishnusai R Final year ECE students, published paper titled Autonomous Upgraded Herbicide Sprayer Using Basic Concepts of Artificial Intelligence in Turkish Journal of Computer and Mathematics Education during 2021.

# **Students Achievements:**

1. Intramural fund of amount Rs. 10,000/- was granted to final year UG students, **Mr M Piyush, Mr Rahil H Sakariya and Mr Rahil Jain** guided by Ms.D.Menaka, AP/EC on the title "Classification of Chromosome using Deep learning approach.

Mr.Jegan K was Winner in Kurukshetra 2021 - web designing at Anna University on 04/04/2021.
 Ms. Gayathri B, was Runner up in CIRCUITRIX 21organized by IEEE Student Branch, SVCE on 31/5/2021.

4. **Ms.Indhumathi.V** won Second Place in GRAPHIE-TY - Takshashila 2021 organized by Chennai Institute of Technology from 17/05/21 to 21/05/21.

5. Mr.Amalan Valliappan M P, Mr. Arvind D, Mr. Aarshik B, Ms. Aswine R was Runner up in Protocol '21-Web Design event at SVCE on 17/05/2021.

6. **Ms.Durga G** won First place in Crypto em held during online symposium Upagaraha-21, organized by ECE Association, SVCE on 7/5/2021.

7. **Ms.Amirta Josna B** was Winner in 2k21-Symosium - Wartech in pranav, at Meenakshi Sundararajan Engineering College on 29/04/2021.

#### **Events Organized**

The ECE Association organized events related to placements for the 2nd year ECE students in order to create an edge for ECE students over others. The Group Discussion was held on 2<sup>nd</sup> and 3<sup>rd</sup> March 2021, 2<sup>nd</sup> April 2021. The Coding test was on 24th and 25th March 2021. The Aptitude test was conducted on 9th April 2021.



Online inter-college national level technical symposium event UPAGRAHA'21 was organized on 7<sup>th</sup> May 2021.

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The Valedictory Ceremony was held by ECEA, ISF SVCE and RAIC on 19th June 2021. The Guest of Honor was Dr. N.Venkateswaran, Chairman, IETE-Chennai Centre and Professor in SSN College of Engineering.



National Conference on Signal Processing, Communication & amp; Networking at SVCE on 05/05/2021 Webinar on "Cloud Data Storage: Challenges and Solutions for Secure Computation " at SVCE on 05/06/2021 Webinar on "Role and Scope of Electronics in Indian Nuclear Sector" at SVCE on 19.06.2021.

Webinar on "Facts of Weather RADAR Applications" at SVCE on 15/06/2021.

Webinar on "Wireless Network Security Challenges and Solutions in the New Normal" at SVCE on 10/06/2021.

Webinar on "Higher Studies Abroad Amidst Pandemic" at SVCE on 27/06/2021.

Webinar on "Biometric for Health care Applications" at SVCE on 25/06/2021.

Webinar on "Design and Develop High power Audio Amplifier without IC" at SVCE on 01/03/2021.

Webinar on "Carbon Nanotube Electronics" at SVCE on 27/05/2021.

Webinar on "Trends in VLSI Design" at SVCE on 17/04/2021.

Webinar on "Accessing Public Data" at SVCE on 05/06/2021.