Vellore Institute of Technology
(Deemed to be University under section 3 of the UGC Act, 1956)

School of Electrical Engineering (SELECT)

Vision

To offer an education in electrical engineering that provides strong fundamental knowledge, skills for employability, cross-disciplinary research and creates leaders who provide technological solutions to societal and industry problems.

Mission

- Provide personalized experiential learning in industry sponsored labs to prepare students in electrical engineering with strong critical thinking and employability skills.
- Foster design thinking, creativity and cross-disciplinary research with highly qualified faculty to create innovators and entrepreneurs in the broad area of electrical engineering.
- Collaborate with national and international partners to provide innovative solutions to societal and industry challenges.

Student Achievements

1. Spectrum Budding Writer Award

Shachi Sinha received the Spectrum Budding Writer Award 2021, in recognition of her remarkable efforts and contributions to the area of Literature.

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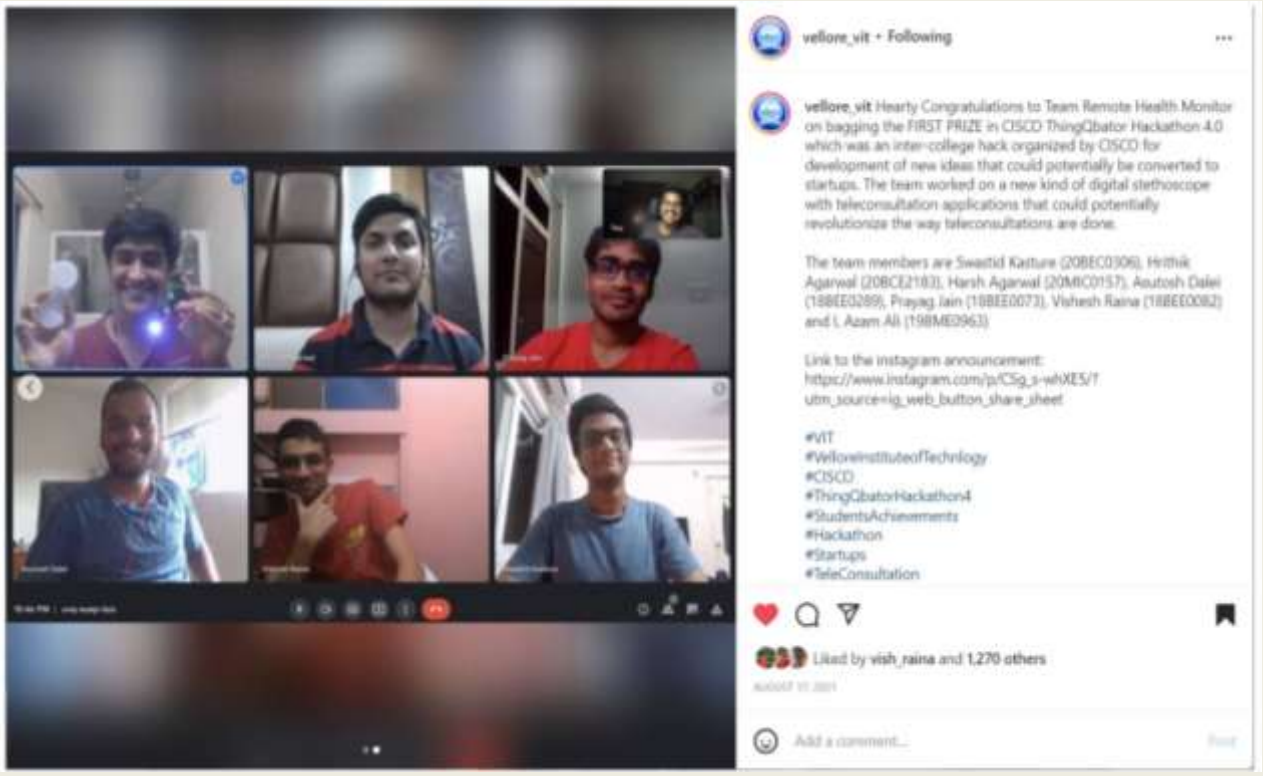
2. First Prize in CISCO Hackathon

The first prize was awarded to Team “Remote Health Moonitor” consisting of Swastid Kasture, Hrithik Agarwal, Harsh Agarwal, Asutosh Dalei, Prayag Jain, Vishesh Raina, and Azam Ali, for developing a new type of digital stethoscope with built-in teleconsultation in the CISCO ThingQbator Hackathon 4.0., an inter-college hackathon conducted by CISCO.



Faculty Achievements

1. Best Paper Award at SGGES 2021

Dr. Indragandhi. V won the best paper award for her paper titled "Power Quality Improvement for Grid-Connected Hybrid Wind-Solar Energy System using a Three-Phase THR" at the Smart Grid and Green Energy Systems 2021 conference, which was held on July 30th and 31st, 2021, organized by Vellore Institute of Technology (India) in collaboration with SEE Kyungpook National University (South Korea), and Naresuan University (Thailand).

2. Best Paper Awards at IEEE MASCON-2021

The following Faculty and Students won the Best Paper Award at IEEE MASCON 2021, a flagship international Conference Series of IEEE Madras Section, held on 27.08.2021

IEEE MADRAS SECTION INTERNATIONAL CONFERENCE 2021

" A flagship International Conference Series of IEEE Madras Section "

27th - 28th, August 2021

IEEE Madras Section

MASCON 2021

Based on the evaluation reports by the reviewers and the session chairs, the following paper has been conferred as BEST PAPER among the papers presented in the technical session D1T5S1.

Paper ID & Title of the paper

MASCON 225 - An Inertia Weight Concept-Based Salp Swarm Optimization Algorithm.

Author(s)

Rakshit Raghavendra Kulkarni, Sunder M, Kishore Bingi, Rhea Mantri and Kaushik Ram Selvaraj

Date & Session of presentation

27.08.2021 / D1T5S1

Dr. N. R. Alamelu,
Convenor, Technical Program Committee

Dr. N. Kumarappan,
General Chair

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IEEE MADRAS SECTION INTERNATIONAL CONFERENCE 2021

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27th - 28th, August 2021

IEEE Madras Section

MASCON 2021

Based on the evaluation reports by the reviewers and the session chairs, the following paper has been conferred as BEST PAPER among the papers presented in the technical session D1T5S1.

Paper ID & Title of the paper

MASCON 192 - Adaptation of Spiral Radius and Angle in Hypotrochoid Spiral Dynamic Algorithm.

Author(s)

Abishek R, Monalisa Maiti, Sunder M, Kishore Bingi and Harshita Puri

Date & Session of presentation

27.08.2021 / D1T5S1

Dr. N. R. Alamelu,
Convenor, Technical Program Committee

Dr. N. Kumarappan,
General Chair

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IEEE MADRAS SECTION INTERNATIONAL CONFERENCE 2021
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27th - 28th, August 2021
IEEE Madras Section
IEEE MASCON 2021
Based on the evaluation reports by the reviewers and the session chairs, the following paper has been conferred as BEST PAPER among the papers presented in the technical session D1T2S1.
Paper ID & Title of the paper
MASCON 191 - Development of Hybrid Algorithm Using Moth-Flame and Particle Swarm Optimization.
Author(s)
Kishore Bingi, Rakshit Raghavendra Kulkarni and Rhea Mantri
Date & Session of presentation
27.08.2021 / D1T2S1
Dr. N. R. Alamelu,
Convenor, Technical Program Committee
Dr. N. Kumarappan,
General Chair
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Top Publications

July 2021

1) Rayguru M.M., Roy S., Kar I.N., "Time-Scale Redesign-Based Saturated Controller Synthesis for a Class of MIMO Nonlinear Systems", IEEE Transactions on Systems, Man, and Cybernetics: Systems, **IF** 13.451

2) Noel M.M., Muthiah-Nakarajan V., Amali G.B., Trivedi A.S. "A new biologically inspired global optimization algorithm based on firebug reproductive swarming behaviour" Expert Systems with Applications, **IF** 6.954

3)Joseph P.K., Elangovan D., Sanjeevikumar P. "System Architecture, Design, and Optimization of a Flexible Wireless Charger for Renewable Energy"- Powered Electric Bicycles IEEE Systems Journal, **IF** 3.931

4)Devan P.A.M., Hussin F.A., Ibrahim R., Bingi K., Khanday F.A. "A survey on the application of wirelesshart for industrial process monitoring and control Sensors", **IF** 3.576

5) Nalajam P.K., Varadarajan R. "A Hybrid Deep Learning Model for Layer-Wise Melt Pool Temperature Forecasting in Wire-Arc Additive Manufacturing Process", IEEE Access, **IF** 3.367

6) Stonier A.A., Murugesan S., Samikannu R., Krishnamoorthy V., Subburaj S.K., Chinnaraj G., Mani G. "Fuzzy Logic Control for Solar PV Fed Modular Multilevel Inverter towards Marine Water Pumping Applications", IEEE Access, **IF** 3.367

7)Pujari H.K., Rudramoorthy M. "Optimal design and techno-economic analysis of a hybrid grid-independent renewable energy system for a rural community International Transactions on Electrical Energy Systems, **IF** 2.860

8) Palanidoss S., Thazhathu S.V., Bhaskar M.S., Kannan R., Baboli P.T. "Comprehensive review of single stage switched boost inverter structures IET Power Electronics", **IF** 2.641

9) Sudabattula S.K., Suresh V., Prabaharan N., Sitharthan R., Rajesh M. "Optimal allocation of renewable distributed generators and shunt capacitors in distribution system using hybrid intelligent approach", International Journal of Ad Hoc and Ubiquitous Computing, **IF** 0.654

Top Publications
August 2021

1) Krishnachaitanya D., Chitra A. “Quantitative analysis of asymmetric multilevel inverters with reduced device count from reliability and cost function perspective-A review”, IEEE Transactions on Power Electronics, **IF** 6.153

2) Muralidhar K., Rajasekar N. “A review of various components of solar water-pumping system: Configuration, characteristics, and performance International”, Transactions on Electrical Energy Systems, **IF** 2.86

3) Sitharthan R., Rajesh M. “Application of machine learning (ML) and internet of things (IoT) in healthcare to predict and tackle pandemic situation Distributed and Parallel Databases, **IF** 1.5

4) Maria Lucas A.F.R., Durairaj S. “A novel multi-input DC-DC landsman converter for plug-in hybrid electric vehicles”, Circuit World, **IF** 0.875

5) Hossion A., Khatavkar S., Arora B.M. “Fabrication of n-i-p diode using hot wire chemical vapor deposition technique”, Journal of Optoelectronics and Advanced Materials, **IF** 0.587

Top Publications
September 2021

1) Iyer T.J., Rahul K., Nersisson R., Zhuang Z., Joseph Raj A.N., Refayee I. "Machine Learning-Based Facial Beauty Prediction and Analysis of Frontal Facial Images Using Facial Landmarks and Traditional Image Descriptors", Computational Intelligence and Neuroscience, **IF** 3.633
2) Rajesh M., Sitharthan R. "Image fusion and enhancement based on energy of the pixel using Deep Convolutional Neural Network", Multimedia Tools and Applications, **IF** 2.757

3) Dhanamjayulu C., Nizhal U.N., Maddikunta P.K.R., Gadekallu T.R., Iwendi C., Wei C., Xin Q. "Identification of malnutrition and prediction of BMI from facial images using real-time image processing and machine learning", IET Image Processing, **IF** 2.373

4) Teekaraman Y., Kuppusamy R., Indragandhi V. "Investigations on the effect of micro- grid using improved NFIS-PID with hybrid algorithms", Computing, **IF** 2.220

5) Vanaja D.S., Stonier A.A., Mani G., Murugesan S. "Investigation and validation of solar photovoltaic-fed modular multilevel inverter for marine water-pumping applications" Electrical Engineering, **IF** 1.836

6) Chittathuru D., Padmanaban S., Prasad R. "Design and Implementation of Asymmetric Cascaded Multilevel Inverter with Optimal Components" Electric Power Components and Systems**, IF** 1.071

Editorial Committee

Prof. Joshua Reddipogu, Assistant Professor Sr.