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| **TLCE** — TEACHING LEARNING CENTER OF EXCELLENCE, VIT, VELLORE<br>உழைப்பே உயர்வு தரும் | **Faculty Development Program** | **VIT**® Vellore Institute of Technology (Deemed to be University under section 3 of UGC Act, 1956) |

| | **Discussion Points** |
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| **Title :** Emerging Engineering Applications of Artificial Intelligence (E2A2I)<br><br><br>**Date :** 02-Apr-2024 - 06-Apr-2024<br>**Time :** 10:00 - 17:30<br>**Venue :** TT 311 | - Predictive Analytics in Renewable and Health Sector<br>- Smartgrid Technologies<br>- Choice of ANN architectures<br>- Digital Twin Technologies for Electrical Vehicles<br>- AI based Digital Transformation in Industry 4.0<br>- Modern Optimization Techniques and its applications<br>- Machine Learning and its Applications in Electrical Engineering<br>- Deep Learning Models - Concepts and Applicability in Renewable Energy and Healthcare Sector<br>- Application of Industry 4.0 in Robotics and Automation<br>- Application ANN Fuzzy in Power System Stability Improvement |

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|  | **Resource Person 1 - Details**<br>**Name :** Dr L Ashok Kumar<br>**Designation :** Professor, Electrical Engineering<br>**University/ Company :** PSG College of Technology, Coimbatore<br>**Address :** INDIA, 641004. |
|  | **Resource Person 2 - Details**<br>**Name :** Dr Vijayakumar K<br>**Designation :** Associate Professor, Electrical Engineering<br>**University/ Company :** IIITDM Kancheepuram , Kancheepuram<br>**Address :** INDIA, 600127. |
|  | **Resource Person 3 - Details**<br>**Name :** Mathew M. Noel<br>**Designation :** Professor Higher Academic Grade, School of Electrical Engineering<br>**University/ Company :** VIT, Vellore<br>**Address :** India, 632014. |
|  | **Resource Person 4 - Details**<br>**Name :** Raja Singh R<br>**Designation :** Associate Professor Sr., Automotive Research Centre<br>**University/ Company :** VIT, Vellore<br>**Address :** India, 632014. |
|  | **Resource Person 5 - Details**<br>**Name :** Mr Gopinath PS<br>**Designation :** COO and Deputy MD, BASE Automation Technologies Pvt Ltd<br>**University/ Company :** BASE Automation Technologies Pvt Ltd, Chennai<br>**Address :** India, 600096. |
|  | **Resource Person 6 - Details**<br>**Name :** Albert Alexander S<br>**Designation :** Associate Professor Grade 2, School of Electrical Engineering<br>**University/ Company :** VIT, Vellore<br>**Address :** India, 632014. |
|  | **Resource Person 7 - Details**<br>**Name :** Dr Udhayakumar K<br>**Designation :** Professor, Electrical Engineering<br>**University/ Company :** Anna University, Chennai<br>**Address :** India, 600025. |
|  | **Resource Person 8 - Details**<br>**Name :** Dr S N Deepa<br>**Designation :** Associate Professor, Electrical Engineering<br>**University/ Company :** NIT Calicut, Kozhikode<br>**Address :** India, 673601. |

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|  | **Resource Person 9 - Details**<br>**Name :** Mr Manikandan P<br>**Designation :** Chief Technology Officer , CodenPlay Robotics<br>**University/ Company :** CodenPlay Robotics , Bangalore<br>**Address :** India, 560060. |
|  | **Resource Person 10 - Details**<br>**Name :** Dr Kumaravel S<br>**Designation :** Associate Professor, Electrical Engineering<br>**University/ Company :** NIT Calicut, Kozhikode<br>**Address :** India, 560060. |

**Resource Person's Profile :**

## 1. Profile of Dr L Ashok Kumar

Dr. L. Ashok Kumar was a Postdoctoral Research Fellow from San Diego State University, California. He was selected among seven scientists in India for the BHAVAN Fellowship from IUSSSTF and also received SYST Fellowship from DST, Govt. of India. He has 3 years of industrial experience and 22 years of academic and research experience. He has published 173 technical papers in International and National journals and presented 167 papers in National and International Conferences. He has completed 2

## 2. Profile of Dr Vijayakumar K

Dr. Vijayakumar Krishnasamy completed his PhD from NIT Trichy and his Post Doctoral from Nanyang Technological University, Singapore. Dr. Vijayakumar Krishnasamy completed his PhD from NIT Trichy and his Post Doctoral from Nanyang Technological University, Singapore. He is currently working as an Associate Professor in Indian Institute of Information Technology Design and Manufacturing Kancheepuram. His area of interest smart grid and renewable energy systems.

## 3. Profile of Mathew M. Noel

Dr. Mathew M- Noel received the M.Tech. degree in electrical engineering from BTS Pilani, India, in 2000, the Ph.D. degree from University of Alabama at Birmingham, in 2005. He is currently working as an Dean and Professor (HAG) with School of Electrical Engineering, Vellore Institute of Technology (VIT), Vellore, India. He has more than 20 years of teaching experience. His research interest areas are Machine Learning, Control, Optimization.

## 4. Profile of Raja Singh R

R. Raja Singh received the B.Tech. degree in electrical engineering from Pondicherry University, India, in 2004, the M.E. degree in power electronics and drives from Anna University, India, in 2008, and the Ph.D. degree in electrical drives from the Indian Institute of Technology (IIT) Roorkee, India, in 2017.,He is currently working as an Associate Professor with the Department of Energy and Power Electronics.

## 5. Profile of Mr Gopinath PS

Mr.Gopinath is a next-gen entrepreneur and a passionate leader. As one of the main functionaries of the BASE Automation Group, he plays a key role in its scaling up towards accelerated growth to become the system integrator of the future. He currently holds the position of Deputy Managing Director and COO at BASE Automation Technologies Pvt Ltd Chennai and is the Founder of BASE Automation INC USA. He is also the treasurer of International Society of Automation, SOIND Chapter

## 6. Profile of Albert Alexander S

Dr.S. Albert Alexander is the recipient of prestigious Raman Research Fellowship from the University Grants Commission (Government of India). He is a Postdoctoral Research Fellow from Northeastern University, Boston, Massachusetts, USA. His current research focuses on fault diagnostic systems for solar energy conversion systems and smart grids. He has 17 years of academic and research experience.

## 7. Profile of Dr Udhayakumar K

Experienced and accomplished Professor with a demonstrated history of working in Academia. Strong education professional skilled in Lecturing, Curriculum Development, Students Mentoring, Career Guidance, Skill Development, Research and Project Guidance, Faculty Development, E-Learning, Higher Education, Industry Collaboration and Placement.

## 8. Profile of Dr S N Deepa

S N Deepa is currently an Associate Professor of Electrical Engineering with the National Institute of Technology Calicut, Kozhikode, India. She possesses 17 years of teaching and research experience and has published ten books with national and international publishers, 106 international journal articles, 12 national journal articles, and 53 papers in national and international conferences.

### 9. Profile of Mr Manikandan P

Mr Manikandan P finished his B.Tech Degree from National Engineering College, Anna University. He was working with JMS automation. Currently he is a Chief technology officer for CodenPlay Robotics which is a software development company on Industry 4.0. He is having 12 years experience on Automation, Software development. His area of interest include Digital twin technology, Robotics and Industry 4.0.

### 10. Profile of Dr Kumaravel S

S. Kumaravel (Senior Member, IEEE) received the B.E. degree in electrical and electronics engineering (EEE) from Bharathidasan University, Tiruchirappalli, in 2002, the M.Tech. degree in power systems from the National Institute of Technology (NIT) Tiruchirappalli, in 2007, the Ph.D. degree in electrical engineering from NIT Calicut, India, in 2012, and the P.D.F. degree from University College Dublin, Ireland. Since 2008, he has been an Associate Professor with the Department of Electrical Eng

Artificial Intelligence (AI) is playing a major role in the fourth industrial revolution and we are seeing a lot of evolution in various machine learning methodologies. AI techniques are widely used by the practicing engineer to solve a whole range of hitherto intractable problems. Artificial intelligence (AI) has become a significant force worldwide, sparking a transformation and revolutionary developments across many industries. By leveraging various machine learning methodologies (ML), engineers can utilise applications of AI to optimize their design procedures and bolster safety and reliability.

LAPTOP

**Coordinator's:**     **Prof. SONAM SHRIVASTAVA 16177 - Assistant Professor Sr. Grade 1 - SELECT**
 **Prof. ALBERT ALEXANDER S 19693 - Associate Professor Grade 2 - SELECT**