



Sri Ramakrishna Institute of Technology

(An Autonomous Institution)

(Accredited by NAAC with "A" Grade)

Pachapalayam, Perur Chettipalayam, Coimbatore – 641 010

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Faculty Profile

Full name with Qualification, Designation and Department:

Dr. S Udaiyakumar ,B.E., M.E., Ph.D.,

Assistant Professor,

Electrical and Electronics Engineering



Date of birth	:	05.08.1991	Gender	:	Male
Nationality	:	Indian	Marital status	:	Single
Address for correspondence	:	135A, 8/7 Pernambut Road, Santhapet, Gudiyatham - 632602	Permanent address	:	135A, 8/7 Pernambut Road, Santhapet, Gudiyatham - 632602
Mobile no	:	8695206364	e-mail (official)	:	udaiyakumar.eee@srit.org
Landline	:	-	e-mail (personal)	:	udaiyakumars123@gmail.com
Date of joining	:	02.04.2018	Post of joining	:	Assistant Professor
No of promotions since D.O.J	:	NIL	Present post	:	Assistant Professor
Present pay scale	:	15600-39100	Gross pay	:	36,611
Employer ID	:	1320	Bank account No. (Salary credited)	:	500101011524226
P.F. No	:	TN/CBE/56764/10834	Group Insurance No	:	AG00059675000102
PAN Number	:	ADGPU2295N	Aadhar Number	:	2442 8660 8793
AICTE ID	:	1-4163156362	AICTE Institution ID	:	1-7841521

Educational Qualification

Degree	Specialization	Year of Passing	Name of the College	Name of the University	Class Obtained
UG	Electrical and Electronics Engineering	2013	Saveetha Engineering college	Anna University	First Class
PG	Power Systems Engineering	2015	Anna University Regional Campus, Coimbatore	Anna University	First Class
Ph.D	Electrical Engineering	2022	Anna University Regional Campus, Coimbatore	Anna University	-
Others					

Registration for Ph.D. with area of interest: NA

Year of Ph.D. Registration: 2016

Year of Ph.D. Completed: 2022

Thesis Title: Multi-step electricity price forecasting using hybrid models based on wavelet decomposition and deep learning neural network optimized by metaheuristic algorithms

Supervisor Recognition Number: NA

Ph.D. Scholar Details

S.No.	Name of the scholar	Registration details	College	Status
-	-	-	-	-

Academic Experience

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Ramakrishna Institute of Technology	Assistant Professor	02.04.2018	-	5	7	22
Total				5	7	22

Industrial Experience

Name of the Organisation	Designation	Nature of Work	Joining Date	Relieving Date	Experience		
					Years	Months	Days
-	-	-	-	-	-	-	-
Total							

Courses Handled

Academic Year	Semester	Course Code	Course Name	Type of Course (T / L)	Pass Percentage
2023-2024	3	20EEG05	Electrical Engineering	T	-
2023-2024	3	20EEE06	Electric Vehicles	T	-
2023-2024	1	20EEG01	Basic Electrical and Electronics Engineering	T	-
2022-2023	4	20EEG03	Electrical and Electronics Engineering	T	72
2022-2023	6	20EE021	Power System Simulation Laboratory	L	100
2022-2023	7	UICH004	Industrial Management and Economics	T	83
2022-2023	7	UEEC016	Final Year Project (Phase - I)	L	100
2022-2023	5	20EE013	Power System Analysis	T	73
2022-2023	1	20EEG01	Basic Electrical and Electronics Engineering	T	74
2021-2022	6	UEEC105	Utilization and Conservation of Electrical Energy	T	85
2021-2022	6	UEEC013	Integrated Design Project (Course Work)	T	92
2021-2022	2	20ECG01	Electric Circuits	T	60
2021-2022	5	UEEG004	Renewable Energy Systems	T	100
2021-2022	3	20EE005	Electric Circuit And Electron Devices Laboratory	L	100
2021-2022	1	20EEG01	Basic Electrical and Electronics Engineering	T	100
2021-2022	1	PPSC001	Advanced Power System Analysis	T	100

2020-2021	2	20EE001	Electric Circuit Analysis	T	100
2020-2021	6	UEEG004	Renewable Energy Systems	T	100
2020-2021	7	UEEC103	Power System Simulation Laboratory	L	100
2020-2021	5	UEEG004	Renewable Energy Systems	T	100
2020-2021	5	UEEE207	Power Plant Instrumentation	T	100
2019-2020	2	UEEC001	Circuit Theory	T	100
2019-2020	6	UEEG004	Renewable Energy Systems	T	100
2019-2020	7	EE6711	Power System Simulation Laboratory	L	100
2019-2020	7	EE6702	Protection and Switchgear	T	74
2019-2020	5	UEEG004	Renewable Energy Systems	T	83
2018-2019	6	EE6613	Presentation Skills and Technical Seminar	L	100
2018-2019	2	UEEC001	Circuit Theory	T	72
2018-2019	3	UICE015	Engineering Workshop Laboratory	L	100
2018-2019	7	EE6702	Protection and Switchgear	T	67

Projects Guided

Academic Year	Semester	Project Title	UG / PG
2023-2024	7	Design and development of solar powered EV charging station	UG
2022-2023	7,8	Automatic shadow detection using digital image processing for solar rooftops.	UG
2021-2022	7,8	Energy Harvesting using Piezoelectric generator on sidewalks to power street lights	UG
2020-2021	7,8	Prediction of Load in Micro Grid System using Multiple Layer Perceptron Trained by Back Propagation Algorithm.	UG
2020-2021	6,7	IoT Based Smart Parking System	UG
2019-2020	7,8	Smart Controlled Street Lights Using LORA	UG
2018-2019	7,8	Standalone PV DC Grid System For SRIT Solar Lab	UG

Publications

Publications	SCI / Scopus / Web of Sciences	Others
Journal	1	1
Conferences	2	0

Journal Publications (IEEE format)

1. Udaiyakumar, S., & Aruldoss, A. V. T. (2021). Week Ahead Electricity Price Forecasting Using Artificial Bee Colony Optimized Extreme Learning Machine with Wavelet Decomposition. Tehnicki Vjesnik-Technical Gazette, 28(2), 556-568.

Conference Publications (IEEE format)

- 1 Chinnadurrai, C. L., Ravindran, S., & Udaiyakumar, S. (2021, October). Energy Management of a Microgrid based on LSTM Deep Learning Prediction Model. In 2021 Smart Technologies, Communication and Robotics (STCR) (pp. 1-6). IEEE.
- 2 Udaiyakumar, S., Chinnadurrai, C. L., Anandhakumar, C., & Ravindran, S. (2022, December). Electricity Price Forecasting using Multilayer Perceptron Optimized by Particle Swarm Optimization. In 2022 Smart Technologies, Communication and Robotics (STCR) (pp. 1-6). IEEE.
- 3 C. Anandhakumar and S. Udaiyakumar “Nonlinear carrier controlled power factor correction boost converter” in 6th International conference on Applied Science Engineering and Technology, (ICASET - 18), 2018, PP – 24.

Books / Book Chapters (IEEE format)

NA

Sponsored Research

Project Title	Funding Agency	Amount Rs.	Duration
-	-	-	-

Consultancy

S. No.	Organization/ Agency	Nature of Work	Amount in Rs.	Year
-	-	-	-	-

Workshops / Seminars attended

1. TEQIP sponsored industry connect hands on workshop on “robotics and automation” at Coimbatore institute of technology on 5th – 6th December 2019.
2. “Implementation of firefly algorithm in SCILAB and μ -Controller” National workshop organized by National Institute of Technology, Tiruchirappalli on 10th -11th October 2014.
3. "Fundamentals of Solar (Photovoltaic) Energy Conversion and Hands-on Workshop on Diverse Applications" Organized by PSG College of Technology & PSG Institute of Advance Studies, Coimbatore, Oct 2014.
4. Attended One Week In-plant training in the area of "Controls & Instrumentation, Meter & Relay testing" in METTUR THERMAL POWER STATION – I, during the period of 21.07.2014 to 25.07.2014.
5. "National Seminar on Distributed Generation & Microgrid" Organized by Kamaraj College of Engineering & Technology, Virudhunagar, May 2014.
6. “Nonlinear carrier controlled power factor correction boost converter” in 6th International conference on Applied Science Engineering and Technology, (ICASET - 18), 2018, PP – 24.
7. National level conference at MAM Engineering College for my PG project “Self-Synchronized Synchronverter for effective and faster synchronization with the grid”

Faculty Development Program attended (from recent)

1. Five days online FDP Programme on “Future Trends & Advances in Electrical Science”, from 04th to 08th April 2022 at SJB INSTITUTE OF TECHNOLOGY.
2. “LaTeX” Six days Faculty Development Programme organized by CMR Engineering College during the period of 1st – 6th July 2020.
3. “Recent Strategies on Micro- and Smart-Grid Technologies” One Week International Faculty Development Programme organized by GMR Institute of Technology during the period of 15th – 19th June 2020.
4. "Recent Advances in Electrical Engineering (RAEE-2020)" One Week National Level Online Faculty Development Programme Organized by VEMU Institute of Technology during the period of 3rd – 7th June 2020.
5. “AI and IoT for Medical Applications” Three days FDP organized by GMR Institute of Technology during the period of 1st – 3rd June 2020.
6. “Research Avenues in Smart Power Grid Technologies” Three days Faculty Development Programme organized by Government College of Technology, Coimbatore during the period of 28th – 30th May 2020.

7. APJ Abdul Kalam Technological University Sponsored 5 days FDP on “Distributed Generation and Smart Grids” at Ahalia School of Engineering and Technology Palakkad, on 24th – 28th June 2019.

Events Organized (from recent)

Conference NIL

FDP NIL

Workshops

1. Acted as Resource person in Hands on Training on repairing electrical appliances on 15.09.2022.
2. Resource person in workshop and hands-on workshop on standalone PV systems
3. Organized the “IoT challenge 2019”, 2 day workshop and competition (prelims) on 05.03.2019 and 06.03.2019 in association with IIT Bombay and i3indiatechnologies.
4. Organized department symposium FLASHOVER 2K19 on 28th January 2019.
5. Conducted an inter-departmental talent hunt ‘E-SOCCER’ on 17th July 2018.

Seminars

1. Resource person in seminar on solar panel installation, maintenance and economics at CIET Coimbatore
2. Resource person in webinar on Introduction to Solar Panel Installation and Maintenance for SRM Madurai College of Engineering and Technology
3. Organized a Seminar on Energy Auditing and its Importance on 26.12.2022
4. Organized Quiz Competition on the eve of Constitution day of India on the topic of “Indian Polity and Constitution” on 24.11.2022
5. Organized a Seminar on EV series 1 - Motor Sizing on 23.09.2022.
6. Organized an Awareness Program on need for energy conservation on 14.12.2021.
7. Organized One Day National Level Seminar on Future Transportation on 22.08.2019.
8. Organized One Day National Level Seminar on GREEN MOBILITY and IoT on 27.07.2019

Online Courses Completed

Sl. No.	Title	Platform
1	Electric Vehicles – Part 1	NPTEL
2	Design of Photovoltaic Systems	NPTEL
3	Leadership and Emotional Intelligence	Coursera
4	Excel Skills for Business: Essentials	Coursera
5	Orientation towards Technical Education and Curriculum Aspects	NITTT
6	Professional Ethics and Sustainability	NITTT
7	Communication Skills, Modes and Knowledge Dissemination	NITTT
8	Instructional Planning and Delivery	NITTT
9	Technology Enabled Learning and Life-Long Self Learning	NITTT
10	Student Assessment and Evaluation	NITTT
11	Creative Problem Solving, Innovation and Meaningful R & D	NITTT
12	Institutional Management and Administrative Procedures	NITTT

Awards and Recognitions Secured

NA

Self-appraisal

Major Strengths

- Quick learning and team working.
- Adaptable to various situations of work and technology improvements.

Major Weakness

Signature