

BIO DATA



Name : Dr. Arun Kumar, A
Designation : Assistant Professor Senior Grade
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Google Scholar link: <https://scholar.google.co.in/citations?hl=en&user=S2jByOUAAAJ>

1. Educational Qualification:

Degree	Branch / Specialization	Institute/University	Year of Passing
B.E.	Electrical and Electronics Engineering	Mepco Schlenk Engineering College, Sivakasi	2012
M.E	Power Systems Engineering	College of Engineering Guindy, Anna university Chennai	2014
Ph.D	Power System Planning	Anna University	2024

2. Professional/ Industry Experience : (in chronological order)

S.No	Designation	Institution/ Organization	Period	
			From	To
1	Assistant Professor (Senior Grade)	Ramco Institute of Technology, Rajapalayam.	01.01.2023	Till date
2	Assistant Professor	Ramco Institute of Technology, Rajapalayam	01.06.2015	Till date
3	Assistant Professor	M. Kumarasamy College of Engineering, Karur	16.06.2014	18.05.2015

3. Research Interest: Power System Planning and Power System stability

4 Publications

4.1 JOURNAL PUBLICATIONS

1. **Arun Kumar, A.** et al. 'Recuperation Based Multi-objective Generation Expansion Planning for a Real-world Power System' Journal of Intelligent & Fuzzy Systems, vol. 45, no. 4, pp. 6751 – 6766.
2. **Arun Kumar Athiappan,** Manikandan Bairavan Veerayan & Kannan Subramanian 2023, 'Multi-Objective Based Generation Expansion Planning for Utility Power System of Tamil Nadu State Considering Recuperation of Older Power Plants', Electric Power Components and Systems, vol. 51, no. 17, pp.1992-2009

Updated as on **18.03.2024**

3. Jeyanthi S, **Arun Kumar A**, Muthu Rani M M , Rohini M I , Divya Jeyashree V “IoT Based Food Waste Monitoring and Controlling System”, Journal of Pharmaceutical Negative Results. Issue No.3, Volume.14 (Feb. 2023), 586–591. DOI:<https://doi.org/10.47750/pnr.2023.14.03.073>.
4. **Arun Kumar Athiappan**, Manikandan Bairavan Veerayan, Kannan Subramanian and Bhuvanesh A, “Application of Cognitive Optimization Algorithms to Solve Generation Expansion Planning Problem by Considering the Recuperation for Aged Thermal Plants”, NeuroQuantology; Bornova Izmir Vol. 20, Issue 8, (2022): 7875 - 7887. DOI:10.14704/nq.2022.20.8.NQ44813.
5. S. Amosedinakaran, T. A. Sunil Raj, R. Robin Jesubalan & **A. Arun Kumar**, “Scada Based Monitoring and Control of DC Motor”, Natural Volatiles & Essential oils, Vol. 8, No. 4, pp. 1587-1601, November 2021. (SCOPUS indexed)
6. R. Jai Ganesh, **A. Arun Kumar**, B. Devi Sri, P. Pragadeesh and N. Srivatshan, “IoT based Covid Patient health monitor during self-quarantine”, Turkish Online Journal of Qualitative Inquiry (TOJQI), Volume 12, Issue 6, July, 2021: 7750-7762 (Scopus Indexed).
7. M.Suba Sathya, J.H.Asalam Javid Khan , M.Velmurugan, **A.Arun Kumar**, Forestalling fire accident in train, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 03, Mar 2020. Impact Factor: 7.34 (UGC Approved)
8. **Arun Kumar A**, B.V. Manikandan ,S. Kannan, A Review on Energy Storage Systems in Distributed Generation for Generation Expansion Planning Study, International Journal of Advanced Science and Technology, 29(7s), 1103 - 1112 (2020). Impact Factor: 0.11, (Scopus Indexed) Retrieved from <http://serisc.org/journals/index.php/IJAST/article/view/10628>
9. M.Suba Sathya, J.H.Asalam Javid Khan , M.Velmurugan, **A.Arun Kumar**, Forestalling fire accident in train, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 03, Mar 2020. Impact Factor: 7.34 (UGC Approved)
10. S. Amathulla Jasila, S. Anupriya, S.R. Deve Kala, T.Priyanga Gandhi, IV EEE and **A. Arun Kumar**, published a paper entitled “PV Grid interconnected Renewable Energy System“, SSRG International Journal of Electrical and Electronics Engineering (SSRG - IJEEE), Special Issue ICRTECITA April 2018.

4.2 CONFERENCE PUBLICATIONS

1. Jeyanthi S, Seenu RA, Hariharasudhan M, Rishi Raghul, **Arun Kumar A**, presented a paper titled “Digital Multimeter”, in the International Conference on Smart Engineering for Renewable Energy Technologies (ICSERET 2023), Ramco Institute of Technology, during March 25, 2023.
2. **Arun Kumar A**, Muthu Ramya R, Jeyapriyadharshini M, Jeyanthi S, presented a paper titled “Warning Sign Cataloging Using Neural Network”, in the International Conference on Smart Engineering for Renewable Energy Technologies (ICSERET 2023), Ramco Institute of Technology, during March 25, 2023.
3. **Arun Kumar A** , M. M. Muthu Rani, M.I. Rohini, V. Divya Jeyashree, S. Jeyanthi presented a paper titled “Smart Garbage Detection System”, in the International Conference on Smart Technologies and Applications (ICSTA 2022) organized by Ramco Institute of Technology, Rajapalayam during March 11 - 12, 2022.

4. R. Maha Guru Backiyam, T. Munieshwari, P. Sangeetha, **A. Arun Kumar**, S. Jeyanthi, presented a paper entitled "Improvement of efficiency of solar cells using nano coating" in the National Web Conference on Challenges and Innovation in Engineering & Technology 2021, during 19 - 20 March 2021.
5. **Arun Kumar A**, B.V. Manikandan, S. Kannan "A Review on Energy Storage Systems in Distributed Generation for Generation Expansion Planning Study" International Conference on Recent Advances in Electrical, Electronics, Computer and Communication Engineering (IconRAEECCCE '19) organised by Mepco Schlenk Engineering College, Sivakasi, December 5-7,2019
6. Computer and Communication Engineering, V Gowtham, A Suriya Prakash, J Vairamuthu, P Deivendran, **A Arun Kumar** "Bike crash detection and reporting using GPS" in National Conference on Recent Trends in Engineering and Science conducted by Cape Institute of Technology,Tirunelveli on March 08,2019.
7. **A. Arun Kumar** "Eigenvalue and Time domain analysis of SSR in Renewable Energy System", National Conference on Innovations in Engineering, Science and Technology – NCIEST-17, organised by Ramco Institute of Technology, Rajapalayam during 24 – 25 March 2017.

4.3 Book/Book chapter publications

Title of the Book: Changing Face of Agriculture, Agri- Business, Agriculture Marketing and Organic Farming- Innovation and Strategies

Chapter Title: Challenges of Municipal Solid Waste Management: An Empirical Study

Publisher: Iterative International Publishers

Volume: 01

ISBN: 978-81-959356-2-8

5. Funded Projects

S.No.	Title of the project	Funding Agency	Duration	Amount	Status
1.	LED Powered Endo Illuminator for Vitreous Surgery	Ministry of Micro, Small & Medium Enterprises (MSME)	1 year	Rs. 14,50,000/-	On-going

6. Ph.D. guidance

Sl.No	Scholar name	University	Topic	Status
NIL				

7. Short term Courses / Seminars /FDP/Workshop/ConferenceAttended:

Sl. No	Title of the event	Organized by	Date	
			From	To
1.	FDP on "NBA Accreditation and Teaching and learning in Engineering"	NPTEL	Jan 2023	Apr 2023
2.	Train the Trainer "Powering IoT using Arduino / Raspberry Pi"	SkillsDA	19.09.2022	23.09.2022

Sl. No	Title of the event	Organized by	Date	
			From	To
3.	TinyML for scientific use cases	Ramco Institute of Technology	25.07.2022	-
4.	Skill Development Training Program on “Internet of Things – Phase II”	ISTE & BNY Mellon.	25.06.2022	11.08.2022
5.	Online Elementary FDP on "Outcome Based Learning"	Viveknand Education Society Business School.	11.01.2022	15.01.2022
6.	Three day workshop on Examination Reforms	AICTE	27.12.2021	29.12.2021
7.	Online FDP on “Universal Human Value”	AICTE	06.12.2021	10.12.2021
8.	ATAL FDP on Soft Computing Techniques	Dr. S. & S. S. Ghandhy Government Engineering College, Gujarat	02.11.2020	06.11.2020
9.	2 Days Online Certified Workshop on Pvsyst	KWATT Solutions Private Limited, Bombay	28.10.2020	29.10.2020
10.	FDP on Research Areas in Energy Audit and Conservation	VIT, Vellore	24.08.2020	26.08.2020
11.	Research Opportunities in Electrical Engineering and its Applications	P.S.R. Engineering College Sivakasi	18.05.2020	23.05.2020
12.	One Day FDP on “Renewable Energy Systems Laboratory-Hands on Training”	Velammal College of Engineering and Technology, Madurai	16.12.2019	-
13.	FDP on “Intellectual Property Rights”	Ramco Institute of Technology Sponsored by Anna University	02.12.2019	07.12.2019
14.	Three-Day FDP on Team Building	Ramco Institute of Technology in association with ICT Academy of Tamil Nadu	18.11.2019	20.11.2019
15.	Application of Advanced Software Tools For Smart Power System	Department of EEE, SSN College of Engineering, Chennai	08.08.2019	09.08.2019

Sl. No	Title of the event	Organized by	Date	
			From	To
16.	Energy Conclave 2018	Department of EEE, Thiagarajar College of Engineering, Madurai	17.12.2018	19.12.2018
17.	Mathematical Optimization Methods for Power Systems	Centre for Continuing Education, IISc, Bengaluru	18.06.2018	22.06.2018
18.	Intelligent Electrical Power Grids (IEPG)	NIT, Tiruchirappalli	27.11.2017	01.12.2017
19.	FDP on Power System Operation and Control	College of Engineering Guindy, Chennai	23.11.2016	29.11.2016
20.	Workshop on “Operation and Control of Wind-driven Generators”	NIT, Tiruchirappalli	15.04.2016	16.04.2016
21.	National Workshop On “Electric Power Quality”	NIT, Calicut	11.03.2016	12.03.2016
22.	STTP on Power Electronics: System and Control	SVNIT, Surat	14.12.2015	18.12.2015
23.	Recent Trends in Power System Protection	NIT, Warangal	27.11.2014	29.11.2014

8. Short term Courses / Seminars /FDP/Workshop/Conference organized:

Sl.No	Title of the event	Organized by	Date	
			From	To
1.	Five Days Value Added Course on “Internet of Things”	Ramco Institute of Technology, Rajapalayam	19.06.2023	23.06.2023
2.	Workshop on “Applications of Tinkercad to Electrical Engineering”	Ramco Institute of Technology, Rajapalayam	17.11.2022	-
3.	Workshop on “Tinkercad for Tomorrow’s Technologists”	Ramco Institute of Technology, Rajapalayam	27.04.2023	-
4.	Value Added Course on “Embedded Controllers and its Applications in Electrical Engineering”	Ramco Institute of Technology, Rajapalayam	10.08.2022	13.08.2022

Sl.No	Title of the event	Organized by	Date	
			From	To
5.	3-Day Online FDP on Bio Inspired Optimization Techniques for Electrical Engineering Applications	Ramco Institute of Technology, Rajapalayam	21.02.2022	23.02.2022
6.	Fun with Electric Circuits	Ramco Institute of Technology	11.05.2020	13.05.2020
7.	Five day finishing school programme on Hands on Training on Arduino Programming and hardware	Ramco Institute of Technology	22.04.2019	26.04.2019
8.	National level Two-Day workshop on Arduino Programming and Hardware	Ramco Institute of Technology	11.01.2019	12.01.2019
9.	One day workshop on “Arduino” in Techyuga 2018	Ramco Institute of Technology	31.08.2018	-

9. Online Courses

Sl.No	Course title	University	Date
1.	NPTEL Course on “NBA Accreditation and Teaching and learning in Engineering”	NPTEL	Jan-Apr 2023
2.	Getting Started with Deep Learning	NVIDIA	23.11.2022
3.	Mathematics for Machine Learning: Linear Algebra	Imperial College London	31.03.2022
4.	Introduction to Programming with MATLAB	Coursera	09.09.2021
5.	Solar Energy: Integration of Photovoltaic Systems in Microgrids	edX	28.10.2020
6.	Linear Circuits 1: DC Analysis	Coursera	20.09.2020
7.	Operations Research: an Active Learning Approach	edX	03.09.2020
8.	Transfer functions and Laplace transforms	edX	01.09.2020
9.	Programming for Everybody (Getting Started with Python)	Coursera	25.06.2020
10.	Electric Power Systems	Coursera	25.06.2020
11.	Vector Calculus for Engineers	Coursera	12.06.2020
12.	Introduction to Differential Equations	MITx	26.12.2019

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13.	Circuits and Electronics 2: Amplification, Speed, and Delay	MITx	31.05.2019
14.	Calculus 1C: Coordinate Systems & Infinite Series	MITx	12.05.2019
15.	Differential Equations: Fourier Series and Partial Differential Equations	MITx	21.12.2018
16.	Calculus 1B: Integration	MITx	09.03.2018
17.	Calculus 1A: Differentiation	MITx	10.09.2017
18.	Solar Energy	Delft University, Netherland	06.06.2017
19.	Smart Grid	IEEEEx	23.12.2016
20.	Circuit and Electronics 1: Basic Circuit Analysis	MITx	09.05.2016

10. Patents filed/awarded: -

SL. NO.	TITLE	APPLICATION NO.	FILED DATE	STATUS	INVENTOR(S)
1.	Multi Terminal Corrosion Free Service Line Clamp	202141004396	01.02.2021	Granted	Mrs. S. Jeyanthi Mr. A. Arun Kumar Dr. S. Kannan Dr. G. Kanthimathi Dr. O. Senthil Kumar
2.	Electronic Control for Electric Vehicle	202241017752	28.03.2022	Granted	Mrs. S. Jeyanthi Mr. A. Arun Kumar Mr. R. Gajendra Mr. K. Vignesh Mr. E. Athinam

11. Copyright filed/awarded:

Sl.NO.	Title of Work	Registration Number / Diary Number	Status	Name of the Author(s)
1.	Handbook on Renewable Energy Systems Laboratory	L-122561/2023	Granted	Mr. A. Arun Kumar, Mrs. S. Jeyanthi

11. Membership in Professional societies : ISTE and IEANG

12. Awards, Recognition & Achievements

1. **Certified with Distinction** under the prestigious IUCEE International Educator Certification Program in Fall 2023
2. Ranked as the **Top 1% Achiever** in the Prestigious NPTEL Course on 'NBA Accreditation and Teaching and Learning in Engineering (NATE)
3. Received **best class adviser award** for the academic year 2019-20 (2017-21 batch)
4. Produced 100 % result in EE6004 – Flexible AC Transmission System in academic year 2017 – 18 Odd Semester.
5. Produced 100 % result in EE6603 – Power System Operation and Control in academic year 2015 – 16 Even Semester.

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Any others (Board of studies/Governing Council/Staff Selection/ Reviewer/other duties)

- Controller of Examinations from 01.10.2022
- Mock Auditor – NBA and NAAC
- Acted as Naan Mudhalvan Single Point of Contact (SPoC) for the academic year 2022-23
- In-Charge for Examination Control office since 01.01.2018
- Member in Internal Quality Assurance Cell (IQAC) for NAAC Accreditation
- PAQIC Member for Department of Mechanical Engineering
- Department Purchase Coordinator
- Department ISO Coordinator