FACULTY PROFILE

Name : Dr. S. N. V. Bramareswara Rao
Designation : Associate Professor
Department : Electrical and Electronics Engg.
Date of Joining : 22-06-2015
Nature of Employment : Regular
Unique ID (AICTE FID) : 1-2658666442
Email : snvbrao.eee@gmail.com

Address for communication:

C/O S. Srinivasa Rao, Door No: 28-1-92, Vijayasri Apartment, Flat No-203, Santhi Nagar 4th Line, Eluru, Andhra Pradesh, India-534007.

Educational Qualifications:

Qualification	Institute	University/ Board	Specialization	Year of Passing	Division/ Class
PG Certification Course	IIT Roorkee	IIT Roorkee	Wireless Technology & IoT	2024	--
Ph.D.	A U College of Engineering, Visakhapatnam	Andhra University	Microgrids (Electrical Engineering)	2022	--
PG (M.E.)	Sir C. R. Reddy College of Engineering, Eluru.	Andhra University	Power Systems and automation	2015	First Class with Distinction
UG (B.E.)	Sir C R Reddy College of Engineering, Eluru.	Andhra University	Electrical and Electronics Engineering	2008	First Class with Distinction
Intermediate	KPR & JL Siddhartha Jr. college, Eluru.	Inter	M.P.C	2004	First Class with Distinction
SSC	St. Xavier's T.M High School, Eluru.	SSC	--	2002	First Class with Distinction

Thesis Details:

Ph.D. –"Study of Energy Management and Power Quality aspects of Interconnected Microgrids".

M.E. – "Performance analysis and Placement of SFCL & FCC to mitigate Fault Currents in Smart Grids with Different types of Distributed Generation Sources".

Work Experience:

Teaching: 16 **Research: 0** **Industry: 0** **Total: 16**

Name of the Organization	Designation	From	To
Sir C. R. Reddy College of Engineering	Associate Professor	01-11-2022	Till date
Sir C. R. Reddy College of Engineering	Assistant Professor	22-06-2015	31-10-2021
Ramachandra College of Engineering	Assistant Professor	02-06-2014	15-06-2015
Sir C. R. Reddy College of Engineering	Assistant Professor	13-06-2008	07-12-2012

Courses Taught:

S. No.	Name of the subject	UG/PG
1	Power System Analysis & Stability	UG
2	Power System Operation and Control	UG
3	Electrical Measurements	UG
4	Signals and Systems	UG
5	Digital Control systems	UG
6	Power Electronics	UG
7	Linear Integrated Circuits and its applications	UG
8	Pulse and Digital Circuits	UG
9	Instrumentation	UG
10	Performance and Design of Electrical Machines-3	UG
11	Real Time Control of Power Systems	PG
12	Advanced Drives and Control	PG

Administrative Responsibilities handled:

S. No.	Description	College/ Department
1	In-charge of Electrical Maintenance	College
2	Techfest Department Co-Coordinator	College
3	Department Level coordinator of games	College
4	Anti-ragging Committee member	College
5	Alumni Coordinator	College
6	Convener of Fee Committee	College
7	IQAC Coordinator	Department
8	Guest Lectures/Workshops In-charge	Department
9	Timetables In-charge	Department
10	Electrical workshop lab in-charge	Department

Research Guidance:

B.Tech.		M. Tech.	
Completed	**On going**	**Completed**	**On going**
15	01	03	01

Project Titles:

S. No.	Year	B.Tech/M. Tech	Title of the Project
1	2025	B.Tech	Development of a Current-Regulated VSI for Hybrid PV-FC Microgrid
2	2024	B.Tech	Modeling and Analysis of Current Controlled Voltage Source Inverter for a Grid Connected Microgrid
3	2024	B.Tech	Analysis & Designing of Droop Control Technique In Interconnected MG's
4	2023	B.Tech	Fault Detection & Classification in Microgrid using Artificial Neural Networks
5	2022	M. Tech	Fault Detection in Cluster Microgrids of Urban Community Using Multi Resolution Technique based Wavelet Transforms
6	2022	B.Tech	Modeling and Analysis of Three Zone Protection Of Transmission Line Using Impedance Relay
7	2021	B.Tech	Development of Hierarchical Multi Agent Based Control Algorithm for Interconnected Microgrids
8	2020	M. Tech	Droop Control with Improved Disturbance Adoption and STATCOM implementation for PV system with Two Power conversion Strategies
9	2020	B.Tech	Operation, Control and Optimization of Microgrid System
10	2019	B.Tech	Modeling and Analysis of Solar/Wind/Fuel Cell Hybrid Power System
11	2018	B.Tech	Modeling and Analysis of Hybrid PV/Wind/FC power system under grid connected mode
12	2017	M. Tech	Modeling and Design of Hybrid Control strategy for power quality improvement in a grid connected renewable energy source
13	2017	B. E.	Analysis and Design of Hybrid Power System
14	2016	B.E.	Mitigation of fault currents using super conducting fault current limiter in Hybrid Power System
15	2012	B.E.	H Bridge VSC with a T-Connected Transformer based three phase four wire D-STATCOM for power quality improvement
16	2011	B.E.	Simulink implementation of induction machine using V/F control
17	2010	B.E.	A T-Connected Transformer and Three-leg VSC Based DSTATCOM for Power Quality Improvement
18	2009	B.E.	Study of dynamic stability of power system using PSS & Fuzzy Controller

Research ID's (Links):

https://scholar.google.com/citations?user=UAXd788AAAAJ&hl=en (**Google Scholar**)

https://www.scopus.com/authid/detail.uri?authorId=57202995366 (**Scopus**)

https://www.webofscience.com/wos/author/rid/AAI-5661-2021 (**Web of Science**)

https://orcid.org/0000-0002-1538-2270 (**ORCID**)

https://sciprofiles.com/profile/2163393 (**Sciprofiles**)

https://www.researchgate.net/profile/N-V-Rao-S (**Research Gate**)

https://vidwan.inflibnet.ac.in/profile/301393 (**Vidwan**)

Research Publications in Journals (National/International):

S.No.	Author(s) Name	Title of the Paper	Name of the Journal	National/ International	Month & Year	Vol., Issue, Pages	Index
1	K. Amarendra, Kiran T., **S. N. V. Bramareswara Rao,** Y. V. P. Kumar, Rammohan M.	Frequency Regulation of Hybrid Two Area Power System with Aggregated Electric Vehicle Integration Using a Novel Cascaded Fractional-Order Two-Degree Controller	Energy Reports (Elsevier)	International	-	-	**Scopus & SCIE**
			Major Revisions Submitted				
2	Y. Chittemma, Kiran T., R. Srinu Naik, **S. N. V. Bramareswara Rao,** Y. V. P. Kumar, Rammohan M.	A Study on Challenges and Solutions in AI-Driven Demand Side Optimization and Security Enhancement for Smart Grids	Computers and Electrical Engineering (Elsevier)	International	Jan 2026	129 Part A, 110779	**Scopus & SCIE**
			https://doi.org/10.1016/j.compeleceng.2025.110779				
3	**S. N. V. Bramareswara Rao**, Y. V. P. Kumar, Md. Amir, S. M. Muyeen	Fault Detection and Classification in Hybrid Energy Based Multi Area Grid Connected Microgrid Clusters Using Discrete Wavelet Transform with DNN	Electrical Engineering (Springer)	International	July 2025	Vol. 107 Issue-7, pp.8481 - 8498	**Scopus & SCIE**
			https://doi.org/10.1007/s00202-024-02329-4				
4	Y. V. P. Kumar, **S. N. V. Bramareswara Rao,** Pradeep DJ	Fuzzy-Based Current Controlled Voltage Source Inverter for Improved Power Quality in Photovoltaics and Fuel Cells Integrated Hybrid Microgrids	Sustainability (MDPI)	International	May 2025	Vol. 17, Issue-10	**Scopus & SCIE**
			https://doi.org/10.3390/su17104520				

5	M. Srikanth, Y. V. P. Kumar, **S. N. V. Bramareswara Rao**	Advanced Virtual Synchronous Generator Control Scheme for Improved Power Delivery in Renewable Energy Microgrids	Engineering Proceedings (MDPI)	International	April 2025	Vol. 87, Issue-1	**Scopus**
			https://doi.org/10.3390/engproc2025087060				
6	M. Srikanth, Y. V. P. Kumar, **S. N. V. Bramareswara Rao**	Fuzzy Logic-Based Adaptive Droop Control Designed with Feasible Range of Droop Coefficients for Enhanced Power Delivery in MG's	Engineering Proceedings (MDPI)	International	April 2025	Vol. 87, Issue-1	**Scopus**
			https://doi.org/10.3390/engproc2025087056				
7	Y. V. P. Kumar, **S. N. V. Bramareswara Rao**, Ramani Kannan	Islanding Detection in Grid Connected Urban Community Multi-Microgrid Clusters Using Decision Tree Based Fuzzy Logic Controller for Improved Transient Response	Urban Science (Q1, IF-2.0)	International	Sep. 2023	Vol. 7, Issue-3	**Scopus & ESCI**
			https://doi.org/10.3390/urbansci7030072				
8	**S. N. V. Bramareswara Rao**, Y. V. Pavan Kumar, Md. Amir, Furkan Ahmad	An Adaptive Neuro-Fuzzy Control Strategy for Improved Power Quality in Multi-microgrid Clusters	IEEE Access (Q1, IF-3.476)	International	Dec. 2022	Vol. 10 128007-128021	**Scopus & SCIE**
			https://doi.org/10.1109/ACCESS.2022.3226670				
9	**S. N. V. Bramareswara Rao**, N. R Narayana, T. D. Prasanna, MSNL Narasimha Rao	Fault Detection in Cluster Microgrids of Urban Community using Multi-Resolution Technique based Wavelet Transforms	IJRER (Q4, IF-8.74)	International	Sep. 2022	Vol. 12, Issue-3, 1204-1215	**Scopus & ESCI**
			https://doi.org/10.20508/ijrer.v12i3.13129.g8505				
10	**S. N. V. Bramareswara Rao**, Y. V. P. K, Padma K, Pradeep DJ, Reddy CP, Amir M, Refaat SS	Day-ahead Load Demand Forecasting in Urban Community Cluster Microgrids Using Machine Learning Methods	Energies (Q1, IF-3.252)	International	Aug. 2022	Vol. 15, Issue-17	**Scopus & SCIE**
			https://doi.org/10.3390/en15176124				
11	Kumar YVP, **S. N. V. B. Rao**, Padma K, Reddy CP, Pradeep DJ, Flah A, Kraiem	Fuzzy Hysteresis Current Controller for Power Quality Enhancement in Renewable Energy Integrated Clusters	Sustainability (Q1, IF-3.889)	International	April 2022	Vol. 14, Issue-8	**Scopus & SCIE**
			https://doi.org/10.3390/su14084851				

12	**S. N. V. Bramareswara Rao**, Kumar YVP, Pradeep DJ, Reddy CP, Flah A, Kraiem H, Al-Asad JF	Power Quality Improvement in Renewable-Energy-Based Microgrid Clusters Using Fuzzy Space Vector PWM Controlled Inverter	Sustainability (Q1, IF-3.889)	International	April 2022	Vol. 14, Issue-8	**Scopus & SCIE**
			https://doi.org/10.3390/su14084663				
13	**S. N. V. Bramareswara Rao**, Kottala Padma	ANN based Day-Ahead Load Demand Forecasting for Energy Transactions at Urban Community Level with Interoperable Green Microgrid Cluster	IJRER (Q4, IF-8.74)	International	Mar. 2021	Vol. 11, Issue-1, 147-157	**Scopus & ESCI**
			https://doi.org/10.20508/ijrer.v11i1.11731.g8121				
14	**S. N. V. Bramareswara Rao**, Kottala Padma	Control of Grid Frequency under Unscheduled Load Variations: A Two Layer Energy Management Controller in Urban Green Building's	IJRER (Q4, IF-8.74)	International	Dec. 2020	Vol. 10, Issue-4, 1951-1961	**Scopus & ESCI**
			https://doi.org/10.20508/ijrer.v10i4.11549.g8097				
15	**S. N. V. Bramareswara Rao**, Y. V. Pavan Kumar, Kottala Padma	Implementation of Minigrid with Hybrid Renewable Energy Sources for Urban Community Buildings	IJRTE	International	Nov. 2019	Vol. 8, Issue-4, 10882-10992	**UGC**
			https://doi.org/10.35940/ijrte.D4412.118419				
16	T. D. Prasanna, **S. N. V. Bramareswara Rao**, P. Lalitha	An Efficient Hybrid Controller for ON Grid PV System with Improved Power Quality Features	IJR	International	June 2019	Vol. 8, Issue-6, 6924-6931	**UGC**
17	**S. N. V. Bramareswara Rao**, Y. V. Pavan Kumar, Kottala Padma	Framework for Forming Minigrids by Interfacing Urban Community Buildings	IJPAM	International	April 2018	Vol. 118, Issue-24, pp.1-19	**UGC**
18	Y. N. Mounika, J. Ayyappa, **S. N. V. Bramareswara Rao**,	Modeling & Design of Hybrid Control Strategy for Power Quality Improvement in Grid Connected RES	IJEAT	International	Dec. 2017	Vol. 7, Issue-2, pp.75-82	**UGC**
19	**S. N. V. Bramareswara Rao**, Shyam Mohan S Palli	Analysis & Positioning of Resistive Super Conducting Fault Current Limiters in Smart Grids	IJEAR	International	June 2014	Vol. 1, Issue-4, 72-76	**UGC**

Research Papers presented in Conferences (India and Abroad):

S.No	Author Name	Title of the Paper	Name of the Conference	National/ Inter national	Month & Year
1	Y. V. Pavan Kumar, **S. N. V. Bramareswara Rao,** G. Pradeep Reddy	Fuzzy Logic Based Model Predictive Current Control for Improved Power Quality in Microgrid Clusters	IEEE TENCON 2024, **Marina Bay Sands, Singapore**	International	Dec 2024
			https://doi.org/10.1109/TENCON61640.2024.10902675		
2	**S. N. V. Bramareswara Rao,** Y. V. Pavan Kumar	Performance Analysis of Different ANN-based Weight Updating Algorithms in Forecasting Short Term Load Demands in Cluster Microgrids	2023 IEEE Open Conference of Electrical, Electronic and Information Sciences (eStream), **Vilnius, Lithuania**	International	May 2023
			https://doi.org/10.1109/eStream59056.2023.10134880		
3	Kottala Padma, **S. N. V. Bramareswara Rao**	A Hierarchical Multi Agent based Coordinated Control for the Interoperable Microgrids Cluster at Urban community	International Conference on Engineering Research & Technology Transfer, **Ethiopia**	Inter National	May 2021
4	**S. N. V. Bramareswara Rao**, Shyam Mohan S Palli, Kottala Padma	Operation and control of wind/ solar/ diesel generator based hybrid microgrid in grid connected mode under fault conditions	IEEE, International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS), Chennai, India (**Scopus**)	Inter National	Aug. 2018
			https://doi.org/10.1109/ICECDS.2017.8389511		
5	**S. N. V. Bramareswara Rao**, Shyam Mohan S Palli	Placement of smart fault current controller to mitigate fault currents in smart grids with different DG's	National Conference in power systems	National	May 2014

Book Chapters:

S.No	Author Name	Title of the Chapter	Publication Name	Month & Year
1	**S. N. V. Bramareswara Rao**, Kottala Padma	A Review on Schemes for Interconnecting Microgrids of Urban Buildings	Springer Lecture Notes in Electrical Engineering Book Series (LNEE) **(Scopus)**	Volume 655, pp. 431-438, April 2021
			https://doi.org/10.1007/978-981-15-3828-5_45	

Workshops/ FDPs/STTPs/ etc., (Attended):

S.No.	Name of the Workshop/ FDP/STTP/ etc.,	Place	Period	
			From	To
1	6 day ATAL FDP on "Role of AI and ML in Smart Grids"	Department of EEE, IIT Patna, Bihar	22-09-2025	27-09-2025
2	A comprehensive online training on Scientific Writing by Cureus Journals	Online by Cureus Journals part of Springer Nature	02-09-2025	
3	7 Day International workshop on "Recent Trends in Electric Vehicles: A Global Perspective"	Department of E.E.E, SRM Institute of Science and Technology, Chennai, India.	19-05-2025	25-05-2025
4	National Seminar on Information and Communication Security	School of Electronics Engineering (SENSE), VIT-AP University, Amaravati (AP), India	28-07-2023	
5	One week national level FDP on Recent Trends in Green Energy Initiatives and Soft Computing Techniques	MGIT, Hyderabad, Telangana	11-07-2023	15-07-2023
6	One week online FDP on Hybrid Electric Vehicles	GMRIT, Rajam and V.R. Siddhartha Engg., college, Vijayawada	21-11-2022	25-11-2022
7	Webinar on Issues in Grid Integration of Renewable Energy	Vignan University, Guntur, Andhra Pradesh	06-06-2021	
8	National Level Webinar On Open Source Software For Econtent Development - Obs Studio	St. Xavier's Institute of Education – Mumbai	06-07-2020	
9	National Level webinar on Integration on Renewable Energy Systems with Microgrid	Prasad V. Potluri Siddhartha Institute Of Technology, Vijayawada	01-07-2020	
10	Five day online STC on Research Opportunities in Power Electronics	Tirumala Engineering College, Narsaraopet	26-06-2020	30-06-2020
11	Five day online FDP on Recent trends in Power Electronics and Energy Storage Systems	Vardhaman Engineering College, Hyderabad	10-06-2020	14-06-2020
12	Webinar on Home Electrical Energy Management	SIRCRRCOE, Eluru	05-06-2020	
13	Webinar of Power Quality Analysis and Simulation Using ETAP	St. Joseph's Institute of Technology, Chennai	19-05-2020	
14	Webinar on Grid connected and Standalone Solar plant Design using Homer PRO	St. Joseph's Institute of Technology, Chennai	14-05-2020	
15	A two week FDP on AI,ML,DL	Ramachandra college of Engg, Eluru	20-01-2020	01-02-2020
16	Effects of Wind on structural and Facade design and Simulation of actual atmospheric	SIRCRRCOE, Eluru	14-12-2018	

	boundary layer and studies in the wind tunnels			
17	A three day workshop and evaluation of research works	SIRCRRCOE, Eluru	17-07-2019	19-07-2019
18	Instructional design and delivery system	SIRCRRCOE, Eluru	04-12-2017	09-12-2017
19	Fuzzy logic and Neural Networks	SIRCRRCOE, Eluru	12-07-2011	

Patents:

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award/ Published Date	Agency/ Country	Status
1	Multi Antenna Handler	Arshad Md., **S. N. V. Bramareswara Rao**, M. A. Raheem, M. H. Ali, G. R. Kiran	380823-001 (Design)	24/11/2023	IP India	**Granted**
2	Artificial Intelligence Based Load Demand Forecasting for Green Microgrid Cluster	**S. N. V. Bramareswara Rao**, N. V. S. R. P. Kumar, L. V. N. Rao, K. K. Chowdary, N. R. Narayana, T. D. Prasanna, T. K. Kiran, A. D. Prasad	202241076962 (Utility)	06/01/2023	IP India	**Published**
3	Hybrid Renewable Energy System Covering Energy Storage Device Coordination Method	K. Padma, **S. N. V. Bramareswara Rao**, A. S. Prakasa Rao, Y. V. P. Kumar, M. Manogna, Satyanarayana B, G. G. Swamy, K. R. Charan	202241039576 (Utility)	15/07/2022	IP India	**Published**

Awards/Fellowship Received:

S. No.	Name of Fellowship	Awarding Agency	Year
1	AICTE-QIP-PG Certification	AICTE, Government of India	2024 (**Rs. 40,000/-**)
2	Visvesvaraya PhD Scheme for Electronics & IT	Digital India Corporation, Ministry of Electronics and Information Technology (MeitY), Government of India.	2016-2022 (**Rs. 2,50,000/-**)
3	Graduate Aptitude Test in Engineering (GATE) Fellowship	Ministry of Human Resource Development (MHRD), Government of India.	2012-14 (**Rs. 1,92,000/-**)

Professional Memberships:

S.No.	Name of the Professional Body	Membership No.	Membership Type
1	MISTE	**LM 80737**	Life Time
2	MIEEE	**96449631**	---

Sponsored Projects:

S. No.	Title	Sponsored by	Amount (Rupees)	Period	Ongoing/ Completed
1	Investigation of Artificial Intelligence Based Hybrid Control Methods for Enhanced Power Quality in Cluster Microgrids	**ANRF-ARG**	42,74,400	3 years	**Under Review**

Membership in BOS/ Editorial Boards:

S. No.	Name of the journal	Editor/ Reviewer
1	Green Electricity Journal (Academic Publisher) https://ojs.acad-pub.com/index.php/GE/about/editorialTeam	Editor
2	Energy Storage and Conversion https://ojs.acad-pub.com/s.php/index/detail?id=274	Editor
3	Journal of Electrical and Electronic Engineering http://www.eeejournal.org/editorial-board	Editor
4	International Journal of Electrical Power System & Technology (STM Journals)	Editor
5	Journal of Power Electronics and Power Systems (STM Journals)	Editor
6	International Journal of Power Electronics and Controllers (STM Journals)	Editor
7	Cybernetics and Systems (Tailor & Francis)	Reviewer
8	Journal of Sustainable Forestry (Tailor & Francis)	Reviewer
9	International Journal of Ambient Energy (Tailor & Francis)	Reviewer
10	IEEE Access (IEEE)	Reviewer
11	Electrical Engineering (Springer)	Reviewer
12	Discover Energy(Springer)	Reviewer
13	Sustainability (MDPI)	Reviewer
14	Applied Sciences (MDPI)	Reviewer
15	Electronics (MDPI)	Reviewer
16	Mathematics (MDPI)	Reviewer
17	World Electric Vehicle Journal (MDPI)	Reviewer
18	Bulletin of Electrical Engineering and Informatics	Reviewer
19	Indonesian Journal of Electrical Engineering and Computer Science	Reviewer
20	International Journal of Power Electronics and Drive Systems	Reviewer
21	International Journal of Computing and Digital Systems	Reviewer
22	Scientific Reports (Springer)	Reviewer

Certification courses completed:

- Coursera certification on "Electric Power Systems"
- Coursera certification on "Solar Energy Basics"

- Coursera certification on "Write and Publish a Paper"

NPTEL Courses:

- 12 Week **NPTEL** Certification on "Introduction to Internet of Things" 2024.

Lectures Delivered:

S.No.	Name of the Workshop/ FDP/STTP/ etc.,	Place	Period
1	Seminar on Clean Energy to Intelligent Grids	IEEE SIRCRRCOE Student branch, Department of E.E.E, Sir C. R. Reddy College of Engineering, Eluru, A.P., India.	22-04-2025
2	One day workshop on Solar PV Emulator for Research and Teaching (Hands on Session)	Computer Centre, Department of E.E.E, Sir C. R. Reddy College of Engineering, Eluru, A.P., India.	27-06-2025

Special Achievements (If any):

- **Resource person** in "Induction Training of Stipendiary cadet trainee police constables at DTC, West Godavari, A.P, India, 2018.
- **Ratified** as an Assistant Professor in **Andhra University**, Visakhapatnam and **Jawaharlal Nehru Technological University Kakinada,** Kakinada Andhra Pradesh.
- Presented a paper in **TENCON-2024** in Marina Bay sands **Singapore**

Personal Details:

Name of the Father : S. Srinivasa Rao
Name of the Mother : S. Sujatha
Marital Status : Married
Nationality : Indian

I hereby declare that the above mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above mentioned particulars.

Dr. S. N. V. Bramareswara Rao