

## 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  
**Date of Birth** : 21-02-1987  
**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 4<sup>th</sup> Line, Eluru, Andhra Pradesh, India-534007.

### **Educational Qualifications:**

<b>Qualification</b>	<b>Institute</b>	<b>University/ Board</b>	<b>Specialization</b>	<b>Year of Passing</b>	<b>Division/ Class</b>
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: 15****Research: 0****Industry: 0****Total: 15**

<b>Name of the Organization</b>	<b>Designation</b>	<b>From</b>	<b>To</b>
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:**

<b>S. No.</b>	<b>Name of the subject</b>	<b>UG/PG</b>
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:**

<b>S. No.</b>	<b>Description</b>	<b>College/ Department</b>
1	In-charge of Electrical Maintenance	College
2	Techfest-2018 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>B.Tech.</b>		<b>M. Tech.</b>	
<b>Completed</b>	<b>On going</b>	<b>Completed</b>	<b>On going</b>
12	02	03	NIL

## Project Titles:

<b>S. No.</b>	<b>Year</b>	<b>B.Tech/M. Tech</b>	<b>Title of the Project</b>
1	2023	B.Tech	Fault Detection & Classification in Microgrid using Artificial Neural Networks
2	2022	M. Tech	Fault Detection in Cluster Microgrids of Urban Community Using Multi Resolution Technique based Wavelet Transforms
3	2022	B.Tech	Modeling and Analysis of Three Zone Protection Of Transmission Line Using Impedance Relay
4	2021	B.Tech	Development of Hierarchical Multi Agent Based Control Algorithm for Interconnected Microgrids
5	2020	M. Tech	Droop Control with Improved Disturbance Adoption and STATCOM implementation for PV system with Two Power conversion Strategies
6	2020	B.Tech	Operation, Control and Optimization of Microgrid System
7	2019	B.Tech	Modeling and Analysis of Solar/Wind/Fuel Cell Hybrid Power System
8	2018	B.Tech	Modeling and Analysis of Hybrid PV/Wind/FC power system under grid connected mode
9	2017	M. Tech	Modeling and Design of Hybrid Control strategy for power quality improvement in a grid connected renewable energy source
10	2017	B. E.	Analysis and Design of Hybrid Power System
11	2016	B.E.	Mitigation of fault currents using super conducting fault current limiter in Hybrid Power System
12	2012	B.E.	H Bridge VSC with a T-Connected Transformer based three phase four wire D-STATCOM for power quality improvement
13	2011	B.E.	Simulink implementation of induction machine using V/F control
14	2010	B.E.	A T-Connected Transformer and Three-leg VSC Based DSTATCOM for Power Quality Improvement
15	2009	B.E.	Study of dynamic stability of power system using PSS and 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	<b>S. N. V. Bramareswara Rao</b> , 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	--	--	<b>SCIE</b>
2	Y. V. P. Kumar, <b>S. N. V. Bramareswara Rao</b> , 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	<b>ESCI</b>
3	<b>S. N. V. Bramareswara Rao</b> , 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	<b>SCIE</b>
4	<b>S. N. V. Bramareswara Rao</b> , 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	<b>ESCI</b>
5	<b>S. N. V. Bramareswara Rao</b> , 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	<b>SCIE</b>

6	Kumar YVP, <b>S. N. V. B. Rao</b> , 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	<b>SCIE</b>
			<a href="https://doi.org/10.3390/su14084851">https://doi.org/10.3390/su14084851</a>				
7	<b>S. N. V. Bramareswara Rao</b> , 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	<b>SCIE</b>
			<a href="https://doi.org/10.3390/su14084663">https://doi.org/10.3390/su14084663</a>				
8	<b>S. N. V. Bramareswara Rao</b> , 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	<b>ESCI</b>
			<a href="https://doi.org/10.20508/ijrer.v11i1.11731.g8121">https://doi.org/10.20508/ijrer.v11i1.11731.g8121</a>				
9	<b>S. N. V. Bramareswara Rao</b> , 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	<b>ESCI</b>
			<a href="https://doi.org/10.20508/ijrer.v10i4.11549.g8097">https://doi.org/10.20508/ijrer.v10i4.11549.g8097</a>				
10	<b>S. N. V. Bramareswara Rao</b> , 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	<b>UGC</b>
			<a href="https://doi.org/10.35940/ijrte.D4412.118419">https://doi.org/10.35940/ijrte.D4412.118419</a>				
10	T. D. Prasanna, <b>S. N. V. Bramareswara Rao</b> , 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	<b>UGC</b>
11	<b>S. N. V. Bramareswara Rao</b> , 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	<b>UGC</b>
12	Y. N. Mounika, J. Ayyappa, <b>S. N. V. Bramareswara Rao</b> ,	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	<b>UGC</b>

13	<b>S. N. V. Bramareswara Rao</b> , Shyam Mohan S Palli	Analysis & Positioning of Resistive Super Conducting Fault Current Limiters in Smart Grids	<b>IJEAR</b>	Inter national	June 2014	Vol. 1, Issue-4, 72-76	<b>UGC</b>
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\***ESCI –Indexed in both Scopus and Web of Science**

### Research Papers presented in Conferences:

S.No	Author Name	Title of the Paper	Name of the Conference	National/ Inter national	Month & Year
1	<b>S. N. V. Bramareswara Rao</b> , 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), <b>Vilnius, Lithuania</b>	Inter National	May 2023
			<a href="https://doi.org/10.1109/eStream59056.2023.10134880">https://doi.org/10.1109/eStream59056.2023.10134880</a>		
2	Kottala Padma, <b>S. N. V. Bramareswara Rao</b>	A Hierarchical Multi Agent based Coordinated Control for the Interoperable Microgrids Cluster at Urban community	International Conference on Engineering Research & Technology Transfer, <b>Ethiopia</b>	Inter National	May 2021
3	<b>S. N. V. Bramareswara Rao</b> , 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 ( <b>Scopus</b> )	Inter National	Aug. 2018
			<a href="https://doi.org/10.1109/ICECDS.2017.8389511">https://doi.org/10.1109/ICECDS.2017.8389511</a>		
4	<b>S. N. V. Bramareswara Rao</b> , 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	<b>S. N. V. Bramareswara Rao</b> , Y. V. Pavan Kumar, Md. Amir	Power Quality Improvement In Hybrid PV-FC Microgrid Using Fuzzy Based Current Controlled Voltage Source Inverter	Artificial Intelligence Based Control of Renewable Energy Systems <b>Taylor and Francis (CRC Press)</b>	<b>Under Review</b>

2	<b>S. N. V. Bramareswara Rao</b> , Kottala Padma	A Review on Schemes for Interconnecting Microgrids of Urban Buildings	Springer Lecture Notes in Electrical Engineering Book Series (LNEE) ( <b>Scopus</b> )	Volume 655, pp. 431-438, April 2021
			<a href="https://doi.org/10.1007/978-981-15-3828-5_45">https://doi.org/10.1007/978-981-15-3828-5_45</a>	

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

S.No.	Name of the Workshop/ FDP/STTP/ etc.,	Place	Period	
			From	To
1	National Seminar on Information and Communication Security	School of Electronics Engineering (SENSE), VIT-AP University, Amaravati (AP), India	28-07-2023	
2	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
3	One week online FDP on Hybrid Electric Vehicles	GMRIT, Rajam and V.R. Siddhartha Engg., college, Vijayawada	21-11-2022	25-11-2022
4	Webinar on Issues in Grid Integration of Renewable Energy	Vignan University, Guntur, Andhra Pradesh	06-06-2021	
5	National Level Webinar On Open Source Software For Econtent Development - Obs Studio	St. Xavier's Institute of Education – Mumbai	06-07-2020	
6	National Level webinar on Integration on Renewable Energy Systems with Microgrid	Prasad V. Potluri Siddhartha Institute Of Technology, Vijayawada	01-07-2020	
7	Five day online STC on Research Opportunities in Power Electronics	Tirumala Engineering College, Narsaraopet	26-06-2020	30-06-2020
8	Five day online FDP on Recent trends in Power Electronics and Energy Storage Systems	Vardhaman Engineering College, Hyderabad	10-06-2020	14-06-2020
9	Webinar on Home Electrical Energy Management	SIRCRRCOE, Eluru	05-06-2020	
10	Webinar of Power Quality Analysis and Simulation Using ETAP	St. Joseph's Institute of Technology, Chennai	19-05-2020	
11	Webinar on Grid connected and Standalone Solar plant Design using Homer PRO	St. Joseph's Institute of Technology, Chennai	14-05-2020	
12	A two week FDP on AI,ML,DL	Ramachandra college of Engg, Eluru	20-01-2020	01-02-2020
13	Effects of Wind on structural and Facade design and Simulation of actual atmospheric boundary layer and studies in the wind tunnels	SIRCRRCOE, Eluru	14-12-2018	
14	A three day workshop and evaluation of research works	SIRCRRCOE, Eluru	17-07-2019	19-07-2019

15	Instructional design and delivery system	SIRCRRCOE, Eluru	04-12-2017	09-12-2017
16	Fuzzy logic and Neural Networks	SIRCRRCOE, Eluru	12-07-2011	

### Sponsored Projects:

S. No.	Name of the project	Funding Agency	Duration & Type	Status	Role	Grant
1	NA	NA	NA	NA	NA	NA

### Patents:

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award/ Published Date	Agency/ Country	Status
1	Multi Antenna Handler	Arshad Md., <b>S. N. V. Bramareswara Rao</b> , M. A. Raheem, M. H. Ali, G. R. Kiran	380823-001 (Design)	24/11/2023	IP India	<b>Granted</b>
2	Artificial Intelligence Based Load Demand Forecasting for Green Microgrid Cluster	<b>S. N. V. Bramareswara Rao</b> , 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	<b>Published</b>
3	Hybrid Renewable Energy System Covering Energy Storage Device Coordination Method	K. Padma, <b>S. N. V. Bramareswara Rao</b> , 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	<b>Published</b>

### Awards/Fellowship Received:

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

### Professional Memberships:

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



### Membership in BOS/ Editorial Boards:

S. No.	Name of the journal	Editor/ Reviewer
1	Green Electricity Journal (Academic Publisher) <a href="https://ojs.acad-pub.com/index.php/GE/about/editorialTeam">https://ojs.acad-pub.com/index.php/GE/about/editorialTeam</a>	Editor
2	Energy Storage and Conversion <a href="https://ojs.acad-pub.com/s.php/index/detail?id=274">https://ojs.acad-pub.com/s.php/index/detail?id=274</a>	Editor
3	Journal of Electrical and Electronic Engineering <a href="http://www.eeejournal.org/editorial-board">http://www.eeejournal.org/editorial-board</a>	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 (Taylor & Francis)	Reviewer
8	Journal of Sustainable Forestry (Taylor & Francis)	Reviewer
9	International Journal of Ambient Energy (Taylor & 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

### Details of Personal Blogs/ Educational YouTube Channels/e content (if any):

- **Personal Blog:** Bramareswararao.blogspot.com
- **Power System Analysis playlist:**  
<https://www.youtube.com/playlist?list=PLdzhX8ESR4Xc9FvmnSXgnRgQ8MYyOVy0Z>
- **Signals and Systems playlist:**  
<https://www.youtube.com/playlist?list=PLokEvIN0a5sgd8CYZtzX3WTPAwPbhQag4>

### Certification courses completed

- Coursera certification on “**Electric Power Systems**”
- Coursera certification on “**Solar Energy Basics**”
- Coursera certification on “**Write and Publish a Paper**”

### Special Achievements (If any):

- **Qualified** in **Gate-2012**.
- Registered Ph.D. in Andhra University under **Visvesvaraya Ph.D. fellowship scheme**, supported by Digital India Corporation, Govt. of India by **securing 16<sup>th</sup> Rank**.
- Appointed as a **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.
- **Ratified** as an Assistant Professor in **Jawaharlal Nehru Technological University, Kakinada**.
- **Observer** for **AP SLPRB** Examination 2023.
- **Observer** for **AP PG CET** Examination 2023.

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**