# **CURRICULUM VITAE**

# Sariki Murali

Research Scholar Department of Electrical Engineering National Institute of Technology, Patna Bihar, India, 800005



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**Contact No:** +91-8639852505 (Mobile)

# **Objective:**

I intended to build my career as a person of respect wherever I work. I always want to work as a team member and cooperate the other teammates. I expect, the people belong to my domain are committed & dedicated to hard work both in professional and their personal life. In effect of this, it will help both on an equal term to explore oneself and realize their own potential.

#### **Academic Records:**

Course	College/Institute	Board/University	Percentage	Year
Ph.D.	National Institute of Technology Patna	National Institute of Technology Patna	8.33 (CGPA)	2022 (Thesis submitted )
M.Tech.	Vignan Institute of Information Technology	JNTU Kakinada	82.7	2017
B.Tech.	Dadi Institute of engineering and Technology	JNTU Kakinada	81.76	2013
Inter/ +2	Sri Chaitanya Junior college	Board of Intermediate Education, A.P	88.8	2009
10 <sup>th</sup> /SSC	Z.P.H School Aganampudi	Board of Secondary School Education A.P	84.5	2007

# **Research Interests:**

Application of artificial intelligent systems, soft computing techniques and knowledge based (Fuzzy) controllers in power system dynamics and control.

# **Research details and publications:**

International Journals: 07International Conferences:09

Book chapter:01

### Google Scholar details:

Google Scholar parameters	Google Scholar citations
Citations	62
h-index	3
i10-index	1

### Links for Academic Track:

Orcid: 0000-0002-2734-0561

**Publons:** https://publons.com/researcher/4575123/sariki-murali/

GoogleScholar: <a href="https://scholar.google.com/citations?user=jeNboywAAAAJ&hl=en">https://scholar.google.com/citations?user=jeNboywAAAAJ&hl=en</a>

### **Professional Services:**

### **Research and Teaching Experience**

Name of the Organization	Position	Experience
National Institute of Technology Meghalaya	Project Associate (SRF)	31.10.2017 to 21.05.2018
Gonna Institute of Information Technology and sciences	Assistant Professor	28.06.2017 to 25.10.2017
VITs Engineering College	Lecturer (II- Shift Ploy technical)	20.08.2014 to 29.06.2015

### **Memberships & Society**

✓ International Association of Engineers - IAENG: 156368

### **Achievements/Awards:**

- ✓ Ministry of education, India National fellowship for PHD, 2018-till date.
- ✓ Ministry of Human Resources and Development, India National fellowship for M. Tech, 2015-2017
- ✓ Best paper award in National conference on RTEEE-2K17 organized by Vigan institute of information technology.

# **Computer and Language Skills:**

- Electrical Engg., Software: MATLAB/Simulink, Typhoon HIL.
- Operating Systems known: Windows 10/XP/Vista/7/8, DOS.

# **Strength and Skills:**

- ✓ Excellent research skills
- ✓ Proficient in grasping new technical concepts and utilizing them in an effective manner
- ✓ Flexible with working hours and having excellent interpersonal skills
- ✓ Ability to resolve problems independently
- ✓ Experience in carrying out experimental research

# Journals published

- 1. Murali, S, Shankar, R. Exploration of novel optimal fuzzy-based controller for enhancement of frequency regulation of deregulated hybrid power system with modified HVDC tieline. **International journal of intelligent systems**, Wiley, 2021; 1-27. https://doi.org/10.1002/int.22715. (SCIE, Impact Factor-8.709).
- Murali Sariki, Ravi Shankar, Optimal CC-2DOF(PI)-PDF controller for LFC of restructured multi-area power system with IES-based modified HVDC tie-line and electric vehicles, Engineering Science and Technology, an International Journal, Elsevier, Volume 32, August 2022, 101058. <a href="https://doi.org/10.1016/j.jestch.2021.09.004">https://doi.org/10.1016/j.jestch.2021.09.004</a>. (SCIE, Impact factor-4.36).
- 3. A. Prakash, S. Murali, R. Shankar, and R. Bhushan, "HVDC tie-link modeling for restructured AGC using a novel fractional order cascade controller," **Electr. Power Syst. Res., Elsevier**, vol. 170, no. December 2018, pp. 244–258, 2019. (**SCI, Impact factor-3.211**). <a href="https://doi.org/10.1016/j.epsr.2019.01.021">https://doi.org/10.1016/j.epsr.2019.01.021</a>
- 4. Murali, S., Shankar, R. Impact of Inertia Emulation Based Modified HVDC Tie-Line for AGC Using Novel Cascaded Fractional Order Controller in Deregulated Hybrid Power System. J. Electr. Eng. Technol., Springer, 16, 1219–1239 (2021). <a href="https://doi.org/10.1007/s42835-021-00666-z">https://doi.org/10.1007/s42835-021-00666-z</a> (SCI, impact factor-1.069).
- Sariki Murali & Ravi Shankar Assessment of Amelioration in Frequency Regulation by deploying Novel Intelligent based Controller with Modified HVDC Tie-Line in Deregulated Environment, Smart Science, 2022, DOI: 10.1080/23080477.2022.2054197 (ESCI/SCOPUS).
- 6. AK Sahani, Ravi Shankar, Murali Sariki, Rajib Kumar Mandal, A coefficient diagram method based AGC mechanism for an interconnected power system in coordination with UPFC and AC/DC link, **Archives of Electrical Engineering, Polish Academy of Sciences** VOL.69(2), pp.287–302, 2020,(SCOPUS).
- 7. B. Arundhati, S. Murali, Madisa V G Varaprasad, Solar Powered Brushless DC motor Drive using Zeta Converter, **International Journal of Pure and Applied Mathematics**, Vol. 114 (8), pp. 81-91.2017, (SCOPUS)

#### **International Journals Under Communication**

- 8. Sariki Murali, Ravi Shankar, Enhancement of frequency regulation using optimal CC-3DOF(PI)-FOPDN controller for multi-area restructured power system. (**Under Communication in IEEE system journal**).
- 9. Sariki Murali, Ravi Shankar, Fuzzy Logic-Based Load-Frequency Control Concerning the performance of energy storage devices. (**Under Communication in IEEE Transaction on Fuzzy Systems**).

10. Sariki Murali, Ravi Shankar, Application deep learning based techniques in the load forecasting for deregulated power system. (**Under Communication in IEEE Intelligent Systems**).

# **Books Chapters**

1. Book Chapter in Soft Computing: Theories and Applications, Sariki Murali and Ravi Shankar, Springer, AISC, volume 1154, July – 2020.

#### **International Conferences**

- 1. S. Murali, A. Prakash and R. Shankar, "LFC of Multi Area Power System with Electric Vehicle using VPL Optimized Controller," 2019 International Conference on Power Electronics Applications and Technology in Present Energy Scenario (PETPES), Mangalore, India, 2019, pp. 1-6, (NIT Surathkal, Karnataka) doi: 10.1109/PETPES47060.2019.9003878
- 2. S. Murali and R. Shankar, "Load Frequency Control Scheme using Inertia Emulation Controlled HVDC Tie-Line," 2019 20th International Conference on Intelligent System Application to Power Systems (ISAP), New Delhi, India, 2019, pp. 1-7, doi: 10.1109/ISAP48318.2019.9065987. (IIT Delhi, New Delhi)
- 3. Sariki Murali and Ravi Shankar, "A True Event Based Meta-Heuristic Algorithm Optimized AGC Mechanism for A Multi-Area Power System,"4th International Conference on Soft Computing: Theories and Applications (SoCTA-2019 National institute of Technology Patna, Patna, India, 2019, pp.391-401.
- 4. S. Murali, R. Shankar and P. Aryan, "A Novel Optimization Technique for LFC and Virtual Inertia Emulation of a Multi Area Hybrid Power System," 2020 International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET), Patna, India, 2020, pp. 1-6, doi: 10.1109/ICEFEET49149.2020.9186998.
- 5. S. Murali, R. Shankar, S. Shrivastav, U. Dhawal and V. Kannauijia, "LFC Scheme for A Deregulated Multi-Area Power System using Cascaded Fractional Order Controller," 2020 International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET), Patna, India, 2020, pp. 1-6, doi: 10.1109/ICEFEET49149.2020.9186958.
- 6. Murali, K. P. Panda and G. Panda, "PV-HESS fed BLDC Driven Water Pumping System with PSO-based MPP Tracking Employing Zeta Converter," 2018 IEEE Innovative Smart Grid Technologies Asia (ISGT Asia), 2018, pp. 196-201, doi: 10.1109/ISGT-Asia.2018.8467896.
- 7. S. Murali, V. N. Kumar and G. Panda, "Solar Powered BLDC Drive with Hybrid Energy Storage System Using Zeta Converter," 2018 3rd International Conference for Convergence in Technology (I2CT), 2018, pp. 1-6, doi: 10.1109/I2CT.2018.8529601.
- 8. S. Murali, S. Kumar, Ravi Shankar, A. Kumar, Reinforcement of Frequency Regulation using an Aggregated EV Fleet in an Islanded Microgrid, IEEE IAS Global Conference on Emerging Technologies (GlobConET), 2022. India 2022, Accepted for presentation.
- 9. S. Murali, K. Abhinav, Ravi Shankar and S. K. Parida, Application of Deep Learning Technique based Load Forecast for Frequency Regulation, IEEE IAS Global Conference on Emerging Technologies (GlobConET), 2022. India 2022, Accepted for presentation.

### **Extra Circular Activities:**

- 1. Completed Junior Diploma in Classical Music, Vocal
- 2. Editorial board member of NIT Patna Institute Magazine "Pratibimb".
- 3. An active member in the Photography Club, NIT Patna.

# **Personal Details:**

Father Name: Sariki Eswararao Mother Name: Sariki Padma Date of Birth: 15/06/1992

Languages known: Telugu, English and Hindi

Marital status: Single

### **References:**

DR. RAVI SHANKAR Assistant Professor (EED) National Institute of Technology Patna Email-ravi@nitp.ac.in

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DR. SANJOY KUMAR PARIDA

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### **Declaration:**

I do hereby declare that the information furnished above is true to the best of my knowledge and belief.

Place: Patna

Sariki Murali