

# DHANEKULA INSTITUTE OF ENGINEERING &TECHNOLOGY

(Approved by AICTE Affiliated to JNTUKakinada)

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#### **FACULTY PROFILE**

Name of the Faculty Dr. P. Pavithra Roy

**Designation** Professor

Date of Joining 01-02-2019

**Nature of Association** Regular

Email & Phone No pavithra.rvk@gmail.com, drpavithraroy@diet.ac.in &

8106323944

**Department** Electronics and Communication Engineering

Educational Background

1. Ph.D. from Sri Venkateswara University, Tirupathi

2. M.Tech (DECS) from JNTU, Anantapur

3. B.Tech(ECE) from JNTU, Hyderabad

**Areas of Specialization** Wireless Communication

Research Areas Cognitive Radio, Spectrum Sensing

Artificial Intelligence

**Total Experience** 14.5 Years

Teaching/Research

**Experience** 10 Years / 4.5

Sl. No	Institute	Designation	Period
1	Dhanekula Institute of Engineering	Prof	Feb 2019 - till date
	& Technology		
2	Vemana Institute of Engineering and	Asst. Prof	Oct 2010 -Dec 2017
	Technology		
3	Aeronautical Development Agency	Senior Research Fellow- B	Aug 2007- Aug 2010
	(ADA), Bangalore		
4	GIT-INC, Bangalore	Design Engineer	Apr 2006- Jul 2007
5	KLCE	Asst. Prof	Nov 2005-Mar 2006
6	Gudlavalleru Engineering College	Asst. Prof	Jul 2005-Oct 2005

# List of Publications (International Journals):

- 1. **Pavithra Roy P.**, "An Enhanced Probabilistic Based Hybrid Neural Network for Spectrum Sensing In Cognitive Radio Networks" International Journal of Advanced Science and Technology Vol. 29, No. 4, (2020), pp. 922-930
- **Pavithra Roy P.**, "Spectrum Sensing in Cognitive Radio Networks using Particle Swarm Optimization Algorithm" International Journal of Advanced Science and Technology Vol. 29, No. 4, (2020), pp. 931-939
- **Pavithra Roy P.**, "Cognitive Radio Network for Robust Spectrum sensing Using Neural Networks" International Journal of Advanced Science and Technology Vol. 29, No. 4, (2020), pp. 959-968
- **Pavithra Roy P.**, "Gravitational Search Algorithm Based Probabilistic Neural Network for Spectrum Sensing in Cognitive Radio Networks" International Journal of Advanced Science and Technology Vol. 29, No. 4, (2020), pp. 969-980
- 5 Dr **P.Pavithra Roy**, M.Jyothsna Sai Lakshmi, P.Bhavani, V.Gangadhar, S. Supriya, "Automatic Billing Trolley" International Research Journal of Engineering and Technology (IRJET) Vol.07, No.07, July 2020. e-ISSN: 2395-0056
- 6 Dr **P.Pavithra Roy**, Phani Veeranki, Sri Lakshmi Pittu, Hanisha Uppalapati, Sri Krishna Teja Sanikommu, "Multi Purpose Smart Agriculture System" International Research Journal of Engineering and Technology (IRJET) Vol.07, No.07, July 2020, e-ISSN: 2395-0056
- **Pavithra Roy P.**, and Muralidhar M., "Hybrid Neural Network Training Algorithm for Spectrum Sensing In Cognitive Radio Networks", International Journal of Mobile Network Design and Innovation, Inder Science Publishers, Vol. 6, No 3, pp. 174-184,2015.
- **Pavithra Roy P.**, and Muralidhar M., "Spectrum Sensing using Probabilistic Neural Networks in Cognitive Radio Network", International Journal of Computer Science & Communication Networks, Vol 5(2),pp.120-127, 2015.
- **Pavithra Roy P** and Muralidhar M., "Channel State Prediction in a Cognitive Radio Network using Neural Network Levenberg-Marquardt Algorithm" International Journal of Wireless Communications and Network Technologies, pp. 24-29, 4(2), 2015.
- **Pavithra Roy P.**, and Muralidhar M., "Throughput Maximization in Cognitive Radio Networks using Levenberg-Marquardt Algorithm", International Journal of Advanced Research in Computer and Communication Engg, pp. 315-319, Vol. 4, Issue 2, 2015.
- **Pavithra Roy P.**, and M. Muralidhar., "Hidden Markov Model based Channel state prediction in cognitive radio networks", International Journal of Engineering Research & Technology, pp.391-394, Vol. 4, Issue 02, February-2015.

## National/International Conferences ((National and International):

- Pavithra Roy P.," Optimal Relay Node selection Using multi-objective based Crow Search Optimization Algorithm for multi user cooperative communication Network", International Conference on Computer Vision, High Performance Computing, Smart Devices and Networks (CHSN-2020), 28-29 December, 2020, Organized by Jawaharlal Nehru Technological University, Kakinada, AP
- 2 **Pavithra Roy P.**, "An Enhanced Probabilistic Based Hybrid Neural Network for Spectrum Sensing in Cognitive Radio Networks", Green Power Technology in Power Grid: Issues, Challenges and Control (ICGPTPG-2019), 19th- 21st Dec 2019, Organized by Sri Venkateswara University College of Engineering, Tirupati, AP
- Pavithra Roy P., and Muralidhar M., "Robust Spectrum sensing in cognitive radio neural networks" 5th First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018), Nov 30- Dec01,2018 Organized by Gudlavalleru Engineering College, Gudlavalleru, AP.

### Achievements / Awards etc.

 Received Best paper Award for the paper "An Enhanced Probabilistic Based Hybrid Neural Network for Spectrum Sensing in Cognitive Radio Networks", Green Power Technology in Power Grid: Issues, Challenges and Control (ICGPTPG-2019), 19th- 21<sup>st</sup> Dec 2019, Organized by Sri Venkateswara University College of Engineering, Tirupati, AP.

Dr. P. Pavithra Roy