

Faculty Profile

Faculty Name	Dr. Poonam Jaglan
Designation	Associate Professor
Qualification	Ph.D.
Email	Jaglanpoonam.ece@piet.co.in
Area of Interest	Image Processing, Artificial Intelligence, Machine learning
Work Experience (Total)	15 Years
<ul style="list-style-type: none"> • Teaching 	9 Years
<ul style="list-style-type: none"> • Research 	6 Years
<ul style="list-style-type: none"> • Industry 	–
<ul style="list-style-type: none"> • Others 	–
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	Analog Electronics, Digital Electronics, DSP, DIP, A& WP, Wireless Comm., Satellite Comm., Microwave & Radar Engineering, and Embedded system and so on.
Membership of Professional Bodies	Edwin Group of Journals, IAENG, The Institution of Engineers (India)
Research Publications	12
<ul style="list-style-type: none"> • Research Papers UGC-CARE 	05
<ul style="list-style-type: none"> • Research Papers SCOPUS 	05
<ul style="list-style-type: none"> • Research Papers WoS/SCI/ABDC 	01
<ul style="list-style-type: none"> • List of Publications 	<ol style="list-style-type: none"> 1. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, “Effect of Noises on MR Images,” in <i>2nd National Conference on Physics of Engineering Materials (NCPem- 2016)</i>, 10-11, March 2016. 2. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, (Jan. 20th, 2018), “Increasing the Efficacy of Breast Tumor Detection through MR Image” [Poster] exhibited at <i>Golden Innovators and Researchers Conclave (GIRC-2018)</i>, 20-21 Jan. 2018.

3. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, "A Comparative Analysis of Various Image Segmentation Techniques," *Proceedings of 2nd International Conference on Communication, Computing and Networking. Lecture Notes in Networks and Systems*, vol. 46, pp. 359-374, Springer, Singapore, Sept. 2018.
4. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, "Detection of Breast Cancer using MRI: A Pictorial Essay of the Image Processing Techniques," *International Journal of Computer Engineering in Research Trends (IJCERT)*, vol. 6, no. 1, pp. 238-245, Jan. 2019.
5. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, "Breast Cancer Detection Techniques: Issues and Challenges", *Journal of The Institution of Engineers (India): Series B Electrical, Electronics & Telecommunication and Computer Engineering, Springer, India*, vol. 100, pp. 379-386, March 2019.
6. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, "Escalate the Efficacy of Breast Tumor Detection through Magnetic Resonance Imaging: A Framework" *International Journal of Information Technology, Springer Nature*, vol. 12(3), pp. 879-887, 2020. DOI: <https://doi.org/10.1007/s41870-019-00393-9>
7. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, "ROI Selection Criteria for Finding the Exact Location & Area of the Breast Abnormal Tissues from Magnetic Resonance Imaging," *International Journal of Engineering and Advanced Technology*, vol. 9, no. 2, pp. 2744-2749, Dec. 2019.
8. Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, "An Automatic and Efficient

	<p>Technique for Breast Tumor Location Detection and Classification” <i>Expert Systems with Applications, Elsevier, 2021, 115580, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2021.115580.</i></p> <p>9. “A review on wireless sensor networks” <i>4th international conference on "Innovative entrepreneurship to minimize carbon footprints</i>, April 19th, 2014.</p> <p>10. “Phase and jitter noise analysis of phase locks loop as frequency synthesizer” <i>International journal of engineering & innovative technology</i>, vol. 3, issue 12, June 2014.</p> <p>11. “Study the effect of noise on phase locks loop in signal processing” <i>International journal of engineering science & innovative technology</i>, vol. 3, issue 3, May 2014.</p> <p>12. “Speech recognition system using wavelet transform” <i>International journal of computer science and mobile computing</i>, vol. 3, issue 8, August 2014.</p>
Book and Chapter Publications	
• Books Authored published by International Publishers	–
• Books Authored published by National Publishers	–
• Publication of Chapter in Edited Books	01
• Editor of Book by International Publishers	–
• Editor of Book by National Publishers	–
• Translation Work of Book	–
• List of Book and Chapter Publications	Poonam Jaglan, Rajeshwar Dass, Manoj Duhan, “A Comparative Analysis of Various Image

	Segmentation Techniques,” <i>Proceedings of 2nd International Conference on Communication, Computing and Networking. Lecture Notes in Networks and Systems</i> , vol. 46, pp. 359-374, Springer, Singapore, Sept. 2018.
Patents	
• Published	–
• List of published patent(s)	–
• Filed	01
• List of filed patent(s)	–
PhD Guidance	
• Degree Awarded	–
• Thesis Submitted	–
M.Tech. Guidance	
• Degree Awarded	03
• Thesis Submitted	–
Research Project	
• List of Research project	Design and Development of AI Based Portable Smart Oral Cancer Screening Device
Consultancy	
• List of Consultancy	–
Awards & Honours	
• List of Awards & Honours	–
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	
• International (Abroad)	–
• International (Within Country)	03
• National	01
• List of published papers	–

Organizing National Conference/ International Conference/ FDP/STTP	
<ul style="list-style-type: none"> • List of Conference/FDP/STTP committee 	<ol style="list-style-type: none"> 1. One Week Workshop on Advance experiments in electronics & communication engineering at ECED, DCRUST, Murthal from 09 Jan. 2017 to 13 Jan. 2017. 2. One week Workshop on Computational intelligence techniques at EED, DCRUST, Murthal from 06 Feb. 2017 to 10 Feb. 2017. 3. Two weeks FDP on Signal & image processing: Issues, Challenges & Techniques at ECED, DCRUST, Murthal from 01 Jan. 2018 to 12 Jan. 2018.
Social Contributions and Sports	
<ul style="list-style-type: none"> • List of Social Contributions and Sports 	<p>–</p>