UNIVERSITY INSTITUTE OF ENGINEERING & TECHNOLOGY PANJAB UNIVERSITY, CHANDIGARH - 160014

FACULTY PROFILE

1. **Name**   **: Dr. Nidhi**
2. **Designation**   **: Assistant Professor**
3. **Department**   **: Electronics & Communication Engineering**
4. **Date of Birth**   **: 14/11/1980**
5. **Qualification**   **: Ph.D (2019), M.E-ECE (2006), B.Tech-Electronics (2003)**

6. **Research area/s**   **: Digital System Design, Digital signal and Bio-signal Processing**

7. **Date of joining in this Department: 17/10/2008**

8. **Contact details**   **: Room No-416, Academic Block-II, UIET**

9. **email-Id**   **: nidhi_garg@pu.ac.in**

10. **Experience**   **: 14 years**

(Provide details of professional experience before joining this institute in the descending order)

Sr. No.	Organization / Institution	Designation	Date of Joining	Date of Leaving
1.	UIET, Punjab University, Chandigarh	Assistant Professor	17-10-2008	Till date
2.	Chitkara Institute of Engineering & Technology, Rajpura	Senior Lecturer	July 2006	16-10-2008
3.	Swami Devi Dyal Institute of Engineering & Technology, Barwala	Lecturer	March 2004	June 2006

11. Publications:

A.   Publications in SCI Journals

1. **Nidhi Garg**, Amandeep Bisht, Hardeep S. Ryait, Amod Kumar, "Identification of motion outliers in wristpulse signal", in Computers & Electrical Engineering, Elsevier, Volume 67, April 2018, pp. 776-790, 2018, Doi: 10.1016/j.compeleceng.2018.03.001,[**SCIE with impact factor 1.747**].

2. **Nidhi Garg**, Hardeep S Ryait, Amod Kumar, Amandeep Bisht, "An Effective Method to Identify Various Factors for Denoising Wrist Pulse Signal using Wavelet Denoising Algorithm", in BIO-MEDICAL MATERIALS AND ENGINEERING An International Journal, IOS Press. Vol. 29, no. 1, pp. 53-65, 2018, Doi: 10.3233/BME-171712, [**SCIE with impact factor 0.872**].

B.   Publications in SCOPUS Journals

1. Himani Jerath, **Nidhi Garg, "E**xploring Human Emotion Recognition Through Physiological Signals", International Journal of Control Theory and Applications, vol.10, pp. 57-62, 2017, ISSN: 0974-5572. [Scopus and UGC approved].

2. Amandeep Bisht, **Nidhi Garg**, Amod Kumar, Hardeep S. Ryait, "COMPARATIVE ANALYSIS OF AWGN FILTERING IN WRIST PULSE SIGNAL," International Journal of Pharmacy & Technology, 9(1), pp: 28201-28209, April 2017. ISSN No. - 0975766X, [Scopus and UGC approved].

3. **Nidhi**, Ramandeep Kaur, Amod Kumar, Hardeep Singh Ryait, "SIMPLEST IMPLEMENTATION TO ERADICATE ARTIFACTS IN WRIST PULSE SIGNALS" International Journal of Pharmacy & Technology, 9(2), pp:29599-29609, June 2017. ISSN No. - 0975-766X, [Scopus and UGC approved].

4. Amandeep Bisht, **Nidhi Garg**, Hardeep S. Ryait, Amod Kumar, "Comparative Analysis of DTW based Outlier Segregation Algorithms for Wrist Pulse Analysis", International Journal of Science and Technology, 9(47), pp: 1-5, Dec 2016. ISSN No.- 0974-6846, Doi: 10.17485/ijst/2016/v9i47/101746, [Scopus and UGC approved].

5. **Nidhi Garg**, Nikita Babbar,"Feature Extraction of Wrist Pulse Signals using Gabor Spectrogram", Indian Journal of Science and Technology, pp- 1-6, 9(47), Dec 2016 DOI:10.17485/ijst/2016/v9i47/101745, [Scopus and UGC approved].

C.   Publications in Refereed Journals

1. Surbhi Gautam, Garima Joshi, **Nidhi Garg**, Classification of Indian Classical Dance Steps Using HOG Features, International Journal of Advance Research in Science and Engineering (IJARSE), 6(8), pp- 1859-1865, 2017.

2. **Nidhi Garg**, "IDENTIFICATION AND VALIDATION OF WRIST PULSE SIGNAL PLATFORM FOR AN OBJECTIVE STUDY", International Journal of Engineering Applied Sciences and Technology,1(5), pp. 87-90, 2016.

3. Sandeep Kumar, **Nidhi Garg**, "A Survey on Joint Data-Hiding and Compression Techniques based on SMVQ and Improved Locally Adaptive Coding Method", International Journal of Computer Applications (IJCA), 96(20), pp. 23-25, June 2014, ISSN- 0975-8887.

4. Jaspinder Kaur, **Nidhi Garg**, Daljeet Kaur, "A survey of Lung Cancer Detection Techniques on CT scan Images", International Journal of Scientific & Engineering Research (IJSER),5(6), pp. 377-380, June-2014, ISSN 2229-551

5. Sandeep Kumar, **Nidhi Garg**, "Integrated Data Hiding and Lossless Image Compression based on SMVQ and Image Inpainting", International Journal of Science and Research (IJSR), 3(6), pp. 2321-2323, June 2014, ISSN: 2319-7064.

6. Jaspinder Kaur, **Nidhi Garg**, Daljeet Kaur, "Segmentation and Feature Extraction of Lung Region for the Early Detection of Lung Tumor", International Journal of Science and Research (IJSR), 3(6), pp. 2327-2330, June 2014, ISSN: 2319-7064.

7. Jasmine Yadav, **Nidhi Garg**, Nipun Sharma, "Analysis of Packet loss and Throughput In Heterogeneous Mobile Ad-hoc Networks over UDP", International Journal of Scientific & Engineering Research (IJSER),4(6),pp. 2728-2731, 2013, ISSN: 2229-5518.

8. Sabina, **Nidhi Garg**, "ADAPTIVE MULTI THRESHOLDING FOR BREAST CANCER STEM CELL DETECTION- A REVIEW", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), 2(3), pp. 691-696, March 2013, ISSN: 2319 – 8753.

9. Hardeep Kaur, **Nidhi Garg**, "Inspection of Defective Pharmaceutical Capsules using Harris Algorithm'', International Journal of Advances in Electronics Engineering, 1(1),pp. 165-166, 2011, ISSN: 2278-215X.

D.   Publications in International Conferences

1. Amandeep Bisht, **Nidhi Garg**, "Quantification of Wrist Pulse Signals : An Overview", 4th International Conference on Advancements in Engineering and Technology (ICAET-2016), 424-428,2016.

2. Nikita Babbar, **Nidhi Garg**, "Progress and advancement in wrist pulse signal", 4th International Conference on Advancements in Engineering and Technology (ICAET-2016),390-394,2016.

3. **Nidhi Garg**, Manu Chopra, Hardeep S. Ryait, Amod Kumar, "Comparative analysis of different techniques for removal of baseline wander from Wrist Pulse Signals(WPS)". In: *2nd International Conference on Recent Advances in Engineering & Computational Sciences (RAECS)* IEEE. pp. 14. 2015. ISBN- 978-1-4673-8253-3, Doi: 10.1109/RAECS.2015.7453397.

4. Manu Chopra, Ramandeep Kaur, **Nidhi Garg**, "Study and evaluation of denoising and baseline wandering of computerized wrist pulse signal using virtual instrument," *1st International Conference on Next Generation Computing Technologies (NGCT)*, Dehradun, pp. 576-579,2015. doi: 10.1109/NGCT.2015.7375186.

5. Ramandeep Kaur, Manu Chopra, **Nidhi Garg**, Hardeep S Ryait, "Role of pulse diagnosis: A review". In: *International Conference on Computing, Communication & Automation (ICCCA 2015)*, IEEE. pp. 152-155, 2015. ISBN- 978-1-4799-8890-7, Doi:10.1109/CCAA.2015.7148391.

6. Jaspinder Kaur, **Nidhi Garg**, Daljeet Kaur, "An automatic CAD system for early detection of lung tumor using back propagation network", *International Conference on Medical Imaging, m-Health and Emerging Communication Systems (MedCom)*, Greater Noida, pp. 257-261, 2014, doi: 10.1109/MedCom.2014.7006014.

7. Shivani Malhotra, Shaifali Madan, **Nidhi Garg**, "Conceptual Development of Particle Swarm Optimization From Social Simulator To An Optimizer", In International level conference on Wireless networks and Embedded Systems (WECON-2008), October 2008, pp. 705-707.

8. Shivani Malhotra, Jitender Virmani, **Nidhi Garg**, " Design of embedded system for measurement of galvinic skin resistance using embedded system for the analysis of anxiety neurosis", In International level International conference on Wireless networks and Embedded Systems (WECON-2008), October 2008, pp. 371-372.

E.   Publications in Book Chapters

1. Harkiranvir Kaur, Preeti Singh, **Nidhi Garg**, Pardeep Kaur , "Enhanced TESRP Protocol for Isolation of Selective Forwarding Attack in WSN", Advanced Informatics for Computing Research (ICAICR 2018), CCIS 956, pp. 501–511, 2019.

2. Himani Jerath, **Nidhi Garg**, "Exploring Human Emotion Recognition: An investigation of different approaches", published in International Conference on Advanced Informatics for Computing Research (ICAICR-2017) at Lyallpur Khalsa College of Engineering, Jalandhar on March 17-18, 2017.

3. **Nidhi Garg**, Ramandeep Kaur, Harry Garg, Ryait H.S., Amod Kumar,"Wrist Pulse Signal Features Extraction: Virtual Instrumentation". In: Singh R., Choudhury S. (eds) Proceeding of International Conference on Intelligent Communication, Control and Devices. Part of the Advances in Intelligent Systems and Computing book series (AISC) vol 479, page no.-135-142 (2017). Springer, Singapore. DOI: 10.1007/978-981-10-1708-7_14.

F.   Publications in National and State Conferences

1. Arvind Kumar, **Nidhi Garg**, Gurpreet Kaur, "Understanding Emotional experience through Physiological signals", presented in Chandigarh Science Congress (CHASCON 2019) at Panjab University Chandigarh on March 13-15, 2019.

2. Himani Jerath, **Nidhi Garg**, "Exploring Emotions and their impacts on physiological signals", presented in Chandigarh Science Congress (CHASCON- 2017) at Panjab University Chandigarh on March 9-11, 2017

3. Jasmine, **Nidhi Garg**, "Implementation and analysis of fragmentation of MPEG-4 Traffic in NS-2 integrated with Evalvid", National level conference on Recent Trends In Information & Communication Technologies (RTICT-2013) at CT Institute of Engineering, management & Technology, Jalandhar (PTU), January 2-3, 2013, pp. 69-70.

4. Hardeep Kaur, **Nidhi Garg,** "Inspection of Defective Pharmaceutical Capsules using Image Processing Techniques'', Paper Published in Proceedings of National Conference cum workshop at RTMC-2011.

5. Hardeep Kaur, **Nidhi Garg,** "Image Processing Techniques for detection of defective Pharmaceutical Capsules", in Chandigarh Science Congress (CHASCON-2011) at Panjab University, Chandigarh, February 26-28, 2011, pp. - ES-336-ES338.

12. M.E and M.tech Thesis guided: Around 15 M.E (ECE)/ M.Tech (Microelectronics) Thesis guided (2008 onwards)

13. Workshops Organized: One day workshop conducted on Embedded systems and its applications in UIET on 17th April, 2018.

14. FDP's / Workshops/ Symposiums Attended:

Sr. No.	Activity	Dates
1	Refresher Course organized by UIET, Panjab University, Chandigarh	January 5-25, 2018
2	Chascon-2018	Feb 12-14, 2018
3	One M2M Developers Tutorial	Feb 19, 2018.

4	National Seminar on Role of Higher Education and Teachers in the Development of Nation organized by Panjab University, Chandigarh	July 16,2017
5	TEQIP sponsored one week workshop on "Image Processing and Machine Learning for Pattern Recognition".	July 11-16, 2016
6	TEQIP Sponsored two day workshop on "Recent Trends in Signal Processing"	April 28-29, 2016
7	Chascon-2015	Feb 25-27,2015
8	All India Ayurvedic Congress "Ayurveda for Holistic Health" held on at Panjab University, Chandigarh.	Mar 12-15,2015
9	Workshop on "Study India Program" organized by ICSSR, PU,	May 11-12, 2015.
10	Workshop on System Design using Optiwave organized by UIET, PU and Gigasoft India, New Delhi	Nov 21,2014
11	Chascon-2014	Feb 26-28,2014
12	STC on DOE-Taguchi Method & Response Surface Methodology (RSM) in UIET,PU,CHD	Jan 6-10,2014
13	International Conference "RAECS-2014"	Mar 6-8,2014
14	STC on DOE-Taguchi Method & Response Surface Methodology (RSM) in UIET,PU,CHD	Jan 6-10,2014
15	NEPTEL workshop at ICSSR Complex,PU,Chd	Aug 5,2013
16	Lab View workshop,UIET,PU,Chd	Dec 4-6,2013
17	Faculty Development Program on "Achieving Excellence in Technical Education" organized by UIET with Infosys at Golden Jublee Hall, PU, Chd	July 16-19, 2013
18	CHASCON-2013	Mar 1-3,2013
19	Refresher Course conducted by Academic Staff College, Panjab University, Chandigarh	Nov 23-Dec 13,2012
20	General Orientation Course conducted by Academic Staff College, Panjab University, Chandigarh	Feb 16 - Mar 15, 2011
21	Symposium on Image Processing Analysis and Clinical Applications at UIET	July 16-17, 2010