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

FACULTY PROFILE



1. Name : Dr. Preeti Gupta

2. Designation : Assistant Professor (ECE Department)

3. Date of Birth : **16th May, 1979**

4. Department : Electronics & Communication Engineering, UIET

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6. Educational Background :

S.No.	Degree	University/Institution	Year
1.	Ph.D.	UIET, Panjab University, Sector-25, Chandigarh	2023
2.	M.E (ECE)	PEC (Deemed University), Sector-12, Chandigarh	2006
3.	B.Tech (ECE)	Punjab Technical University (PTU), Jalandhar	2001

7. Professional Background:

S.No.	Organization / Institution	Designation	Duration
1.	UIET, Panjab University, Sector-25, Chandigarh	Assistant Professor	Aug, 2007 - Till Date
2.	CCET, Sector-26, Chandigarh.	Lecturer	Mar, 2004 to Aug, 2007
3.	SDDIET, Barwala	Lecturer	July, 2003 to Mar, 2004

8. Research Areas : Digital System Design, Image Processing, Machine Learning.

9. Google Scholar Profile:

https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AIfU4H4alQl8iBquLMtg8cM

<u>IJkYAxcF5cG_9n117yvAYxLX1uNJp4K2nEB92_K06mb6--QGIF-</u> VyTsGFEY7loQ&user=Zc7Xt20AAAAJ

10. Selected Publications

- A. Rani, P. Singh, N.Garg, C. Madhu, P. Gupta et al, "A Deep Learning-Based Structural Off-line Approach for the Automatic Recognition of Handwritten Punjabi Characters", Journal of Electrical Systems, Vol. 20, No. 3, pp. 6404-6420, 2024.
- P. Gupta, S. Kaur, P. Sharma, "CT-Based Brain Disease Classification Using Fine-Tuned Transfer Learning Models and Custom Convolutional Neural Network", 2nd International Conference on Emerging Technology and Sustainable Solutions, **October 8-9, 2024**.
- P. Sharma, V. Khullar, P. Gupta, R. Popli and I. Kansal, "Automatic Coal and Coal Gangue Image Recognition using Transfer Learning", *International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE)*, Chennai, India, pp. 1-3, Nov, 2023.
- P. Gupta, N. Aggarwal, R. Vig, "Recent Advancements in Iris Biometrics with Indexing: A
 Review", Book chapter on Manufacturing Engineering and Materials Science: Tools and
 Applications for International Conference on Advances in Materials and Manufacturing
 Technology (AMMT-2022), Nov 2023.
- M. Saini, P. Gupta, H. Kaur, "Comprehensive Study of Indexing Techniques Used for Extracting CNN Features", In 2023 5th International Conference on Inventive Research in Computing Applications (ICIRCA), pp. 59-65. IEEE, Aug. 2023.
- M. Saini, P. Gupta, H. Kaur, "Hash based image indexing framework using deep learning", 14th International Conference on Computing Communication and Networking Technologies (ICCCNT), Delhi, India, July 2023.
- P. Nahar, P. Gupta, H. Kaur, "U-Net based Semantic Segmentation for Touchless Fingerprint Technology: A Reflective Review", *IEEE Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)*, Gwalior, India, 2022, pp. 1-6,
 December 2022.
- P. Gupta, N. Aggarwal, R. Vig, "Analysis of Epoch Length on the Classification of a Noisy Iris Biometric System", International Journal of Engineering Research & Technology (IJERT) Volume 11, Issue 12, **December 2022**.
- A. Trehan, P. Gupta, S. Agrawal, "Three-Level Leach Protocol to Increase Lifetime of Wireless Sensor Network", *Springer Book Chapter in Communications in Computer and Information Science, CCIS* 956, pp. 490–500, **January 2019**.
- P. Kaur, P.Gupta, "A Review on High Speed Advance Encryption Standard (AES)", 2nd International Conference on *Recent Research and Innovations in Social Sciences, Humanities & Education (ICRRISHE-2018)*, August, 2018.

- R. Kaur, P.Gupta, J. Singh, "Design of Power MOSFET using V-Groove Trench Structure", *CHASCON-2017*, March, 2017.
- N. Kamboj, P. Gupta, "A Review on Segmentation techniques for Iris Recognition System",
 International Journal of Engineering and Management Research, pp. 14-16, volume-5, Issue-2,
 April-2015.
- K. Devi, P. Gupta, D. Grover, A. Dhindsa, ".An Effective Feature Extraction Approach for Iris Recognition System", *International Journal of Science & Technology*, Vol 9, Issue No. 47, pp 1-5,
 December 2016.
- A Review on MOSFET Device Structures, International Journal for Research in Applied Science
 & Engineering Technology (IJRASET), Volume-5, Issue-X, pp: 208-218, October 2017.
- P. Gupta, S. Soni, N. Gupta, "A Comparative Analysis of Nonlinearities on the Spectral Efficiency of DWDM transmission systems", *National Conference on Modern Trends in Information and Communication Technology (NCMTICT-2005)*, pp. 75-76, 2005.
- V. Khandelwal, P. Gupta and AS Mandal, "Designing of a 2-D Gabor Filter for Real Time Applications", *International Conference on Engineering Innovation and Technology, Nagpur on July 1*, 2012(pp. 13-16). ISSN 978-93-8169-47743, **July 2012.**
- S. Soni, Preeti Gupta and Neena Gupta, (2008, October). The Hidden Markov Method (HMM) Structure and Selected Applications in Speech Recognition. In *International Conference on Wireless Networks and Embedded Systems (WECON-2008), Chitkara Institute of Engineering and Technology, Rajpura on October 18-19, 2008*, pp. 447-449, **October, 2008**.
- S. Mahajan, P. Gupta and V. Kumar, (2019, October), "Analysis of 64-channels based Isowc System Using Different Reduction Techniques", *Journal of Optical Communications*, October 2019.
- D.Grover, K. Devi and P. Gupta, "A two-fold Security Approach for an Iris Template. *International Journal of Pharmacy and Technology*, 8(3), pp. 19094-19103,
 September, 2016.
- S.Sharma and P.i Gupta, "Vision Technique for Smart Vehicle Using Ant Colony Algorithm.
 International Journal of Scientific & Engineering Research, 4(9), pp. 1428-1431, September,
 2013.
- Jaspreet Kaur and Preeti Gupta, "Fuzzy-logic Based Adaptive Noise Filter for Real-time Imaging Processing Applications", *IJCSI International Journal of Computer Science Issues*, 9(4), pp. 1-3, July 2012.