



## FACULTY PROFILE

**Name:** Dr. Pushendra Singh

**Designation:** Associate Professor

**E-Mail:** pushpens1@srmist.edu.in

### Professional Qualification:

- **Ph.D. in Computer Science & Engineering** from Dr. APJ Abdul Kalam Technical University, Lucknow (UP) in April 2021 under the supervision of **Prof.(Dr.) P.N. Hrisheeksha, Ph.D.(IIT Roorkee)**.
- **Master of Engineering (M.E.) in Computer Science and Engineering (2 Year Full Time)** (2008-10) from **NITTTR, Chandigarh (Punjab University)**, (With 65.80%).
- **Bachelor of Technology (B.Tech.) in Computer Science and Engineering** (2000-2004) from **INSTITUTE OF INTEGRAL TECHNOLOGY, Lucknow** affiliated to UP Technical University, Lucknow U.P. (With 65.62%).

### Publications - International Journals:

- **Pushendra Singh**, et.al. , "A Secure and Stable Humanoid Healthcare Information Processing and supervisory Method with IoT-Based Sensor Network", *Journal of Sensors*, Vol. 2022, Article ID 8568540, 13 pages, 2022. <https://doi.org/10.1155/2022/8568540> **[SCIE, IF: 2.137]**
- **Pushendra Singh**, et.al. , "A Machine Learning Model for Early Prediction and Detection of Sepsis in Intensive Care Unit Patients", *Journal of Healthcare Engineering*, vol. 2022, ArticleID 9263391, 11 pages, 2022. <https://doi.org/10.1155/2022/9263391> **[SCIE, IF: 2.682]**
- **Pushendra Singh**, et.al, "An Optimized Artificial Intelligence System Using IoT Biosensors Networking for Healthcare Problems", *Computational Intelligence and Neuroscience*, Vol. 2022, ArticleID 2206573, 14 pages, 2022. <https://doi.org/10.1155/2022/2206573> **[SCIE IF: 3.633]**

- **Pushendra Singh**, et.al. , “A Novel Model for Visual Content Based Image Retrieval using Transfer Learning,” *International journal of engineering and advanced technology*, 11(6):101-107, (August 2022). DOI: [10.35940 /ijeat.f3725 .0811622](https://doi.org/10.35940/ijeat.f3725.0811622).
- **Pushendra Singh**, et.al. , “Deep CNN Based Hybrid Model for Image Retrieval”, [\*International Journal of Innovative Technology and Exploring Engineering\*](#) 11(9):23-28, (August 2022), DOI: [10.35940/ijitee.G9203.0811922](https://doi.org/10.35940/ijitee.G9203.0811922).
- **Pushendra Singh**, et.al. , “CBIR-CNN: Content Based Image Retrieval on celebrity data using Deep Convolution Neural Network”, *Recent Advances in Computer Science and Communications 2021*; 14(1). [https:// dx.doi.org /10. 2174 /2666255813666200129111928](https://dx.doi.org/10.2174/2666255813666200129111928) [SCOPUS].
- **Pushendra Singh**, et.al. , “Ensemble Visual Content based Search and Retrieval for Natural Scene Images”, *Recent Advances in Computer Science and Communications 2021*; 14(2). [https://dx.doi.org /10.2174 /221327591 26661903 27175712](https://dx.doi.org/10.2174/2213275912666190327175712) [SCOPUS].
- **Pushendra Singh**, et.al. , “Comparative Study of Color and Texture Features for Image Retrieval on Natural Datasets”, *Proceedings of 2nd International Conference on Advanced Computing and Software Engineering (ICACSE) 2019*. <http://dx.doi.org/10.2139/ssrn.3350992>
- **Pushendra Singh**, et.al. , “A Review on Shape based Descriptors for Image Retrieval”, *International Journal of Computer Applications* 125(10):27-32, September 2015. Published by Foundation of Computer Science (FCS), NY, USA.
- **Pushendra Singh**, et.al, “Automatic License Plate Recognition Using OpenCV”, *International Research Journal of Engineering and Technology (IRJET)*, Volume: 07 Issue: 05 | May 2020.
- **Pushendra Singh**, et.al, “Criminal Identification based on Sentiments using Facial Features”, *International Research Journal of Engineering and Technology (IRJET)*, Volume: 07 Issue: 06 | June 2020.
- **Pushendra Singh**, et.al, “Semi-Automated Online Exam Proctoring”, *International Journal of Scientific Research in Engineering and Management (IJSREM)* Volume: 05 Issue: 07 | July – 2021, ISSN: 2582-3930.

#### **Publications - International/National Conferences:**

- **Pushendra Singh**, et.al, “Music Facial Emotion-Based Automatic Recommender System”, *International Conference on Sustainable Emerging Innovations in Engineering and Technology(ICSEIST-2023)*, Technically sponsored by IEEE UP Section on 14-15 September 2023 at ABES Engineering College Ghaziabad (UP) [SCOPUS Indexed\*].

- **Pushpendra Singh**, et.al, "Artificial Intelligence enabled IOT system for football identification in a football match", 12<sup>th</sup> International Advanced Computing Conference on 16-17 December 2022 organized by CMR College of Engineering & Technology, Hyderabad, Telengana. [**SCOPUS Indexed**]
- **Pushpendra Singh** , et.al. , "Experimenting the image classification using modified model", 4th International Conference on Modern Mathematical Methods and High performance Computing in Science and Technology [M3HPCST-2022], Motherhood University, Roorkee, UttraKhand, INDIA held on 22-24, December, 2022.
- **Pushpendra Singh, et.al.** , "TRIP-A COMPLETE TOURISM SOLUTION", 2<sup>nd</sup> International Conference on Advancement in Electronics & Communication Engineering (AECE 2022) July 14-15, 2022. <https://ssrn.com/abstract=4157583>. [**SCOPUS Indexed**]
- **Pushpendra Singh, et.al.** , "Implementation of Knowledge based Collaborative Filtering and Machine Learning for E-Commerce Recommendation System", 3rd International Conference on Computational & Experimental Methods in Mechanical Engineering (ICCEMME-2021). [**SCOPUS Indexed**]
- **Pushpendra Singh, et.al.** , "An Analysis of Software Re-engineering through C to Java Conversion" in National Conference on Emerging Trends in Engineering and Technology (ETEAT-2013) on March 16-17, 2013 organized by Vishveshwarya Institute of engineering & Technology, G.B. Nagar (UP).
- **Pushpendra Singh, et.al.** , "Design Quality Metrics in open source software ", in National Conference on Emerging Trends in Advanced Computing & Informatics (May 8-9, 2010) at Shobhit University, Meerut, Uttar Pradesh.

#### **Patents [Granted-01, Published-04]**

1. Published an Indian Patent on "**A Tongue-Driven Vehicle with Vehicle Tracking Technology and Flexible Speed Regulation for People with Disabilities**" [Application No. 202211063521] published on 18 November 2022.
2. Granted an Australian Patent on "**Walking Stick for Blind person with multiple sensors**" [Patent No: 2021104044] on 6 April 2022.
3. Published an Indian Patent on "**Method for Performing Big Data Analytics**" [Application No: 202211013811] on 25 March 2022.
4. Published an Indian patent on "**System and Method for Detecting Defects in an Article**" [Application Number - 202111052166] on 26 November 2021.

5. Published an Indian patent titled “**Deep Learning Model Based Fraudulent Incoming Call Detection System**” [Application Number - 202111009215] published on 12 March 2021.

### **Awards and Achievements**

- **UGC-NET, December- 2013** Qualified in Computer Science & Applications.
- **GATE-2011** Qualified in Computer Science & Information Technology.
- Passed with **Elite category** of Six NPTEL 12-week Courses on different subjects like **Deep Learning - Part-1, Compiler Design, Introduction to Data Mining, Introduction to Soft Computing, Human Computer Interaction** and **Introduction to Machine Learning**, from 2017-2020.
- Participated as **Session Chair** in the 2<sup>nd</sup> International Conference on “**Sustainable Energy and Green Technologies (SEGT-23)**” on **June 23<sup>th</sup> & 24<sup>th</sup>, 2023**. organized by Department of Mechanical Engineering, Raj Kumar Goel Institute of Technology Ghaziabad (UP)-201003, India.
- Participated as **Session Chair** in 4th International Conference on Modern Mathematical Methods and High performance computing in Science and Technology [M3HPCST-2022], Motherhood University, Roorkee, Uttarakhand, INDIA held on 22-24, December, 2022.
- Participated as a **Panel Member of Judges** in District Level Science Exhibition and Competition Organized by Bihari Lal Inter College, Dankaur, Gautam Buddh Nagar Under UP Government's, "Samagra Shiksha Abhiyan" on 07 December 2022.
- Participated as **Session Chair** in the **AICTE Sponsored** International Conference on “Advancement in Electronics & Communication Engineering **AECE-2022**”, organized by Department of Electronics & Communication Engineering at RKGIT, Ghaziabad during, 14<sup>th</sup> -15<sup>th</sup> July, 2022.
- Participated as **Session Chair** in the 1<sup>st</sup> International Conference on “**Sustainable Materials Manufacturing and Energy Technologies**” held on 24th to 25th June 2022, organized by Department of Mechanical Engineering, Raj Kumar Goel Institute of Technology Ghaziabad (UP)-201003, India.
- Reviewer for International Journal of Electrical and Electronics Research (IJEER) - **Scopus Indexed Journal**.
- An active instructor in the Cisco Networking Academy program at RKGIT, Ghaziabad, UP from Dec. 2021 to April 2023.

### **Workshops/Seminars/FDPs**

- Attended Two Week AICTE Training And Learning (ATAL) Academy Blended/Hybrid FDP on “**Design Thinking as tool for Innovative Teaching Pedagogy**” from 20 Feb – 03 March, 2023 at **BIRLA INSTITUTE OF TECHNOLOGY, MESRA, EXTENSION CENTER NOIDA.**
- Attended One Week IEEE CIS Summer School/FDP on "**Research Trends in Artificial Intelligence and Machine Learning for Engineering Challenges**" held at **Malaviya National Institute of Technology Jaipur, India** from **6th -10th, December, 2022** sponsored by IEEE Computational Intelligence Society.
- Attended One Week Online Faculty Development Programme (FDP) on “Block chain Technology and Its Applications” organized by the Department of Computer Science & Engineering and IT, **Jaypee Institute of Information Technology, Noida** from **25th July to 30th July 2022.**
- Attended AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Cyber Physical Systems and Industrial IoT" **from 17/01/2022 to 21/01/2022** at SRM Institute Of Management Technology, Modi Nagar, Ghaziabad, UP.
- Attended 3<sup>rd</sup> Edition of the workshop on “Applications of MACHine Learning in SiGnal, ImAge & CoMputer Vision - AMALGAM 2021” conducted and organised by IEEE Young Professionals Affinity Group UP Section, IEEE Signal Processing Society UP Chapter and **BTKIT Dwarahat, Uttarakhand** on **27 Dec to 31 Dec 2021.**
- Completed successfully one week Online Faculty Development Program on “**Machine Learning using Python**” organized by **NITTR Chandigarh** form 25-29 October, 2021.
- Completed successfully two week AICTE Sponsored QIP STC on “**Data Analytics and Its Application to Industries**”, from 14 Dec to 26 Dec, 2020, at **IIT, BHU, Varanasi, UP.**
- Completed successfully AICTE sponsored 1<sup>st</sup> Online Short Term Training Program on "**Data Analytics with Python**" from 7 Sept to 11 Sept, 2019 at **Indian Institute of Technology, Kanpur, UP.**
- Completed successfully AICTE sponsored Short Term Training Program on “**Machine Learning and its Application**" from 9 July to 13 July, 2018 at **Indian Institute of Technology, Roorkee, UK, INDIA.**

### **Work Experience:**

1. Associate Professor, Department of Computer Science & Engineering, SRMIST Delhi-NCR Ghaziabad UP(INDIA) **[From 09 August 2023 to till date]**
2. Professor & Head, Department of Information Technology, IMS Engineering College Ghaziabad UP(INDIA).**[From 02 May 2023 to 08 Aug 2023]**
3. Associate Professor & Head, Department of Information Technology, Raj Kumar Goel Institute of Technology, Ghaziabad, (UP). **[From 09 Sept, 2021 to 01 May 2023]**

4. Assistant Professor, Department of Information Technology, Inderprastha Engineering College, Ghaziabad, (UP)[**From 22 Feb 2010 to 08 Sept 2021**].
5. Lecturer, Department of Computer Science & Engineering, Vishveshwarya Institute of Engineering & Technology, Ghaziabad, (UP) [**From 15 Jan 2007 to 31 July 2008**].
6. Lecture (Contract), Department of Information Technology, UNSIET, VBS Purvanchal University, Jaunpur (UP) [**24 Oct 2005 to 10 Jan 2007**]

**Professional Memberships:**

- IEEE UP Section Graduate Student Member & Young Professional [Member id:92412622]
- IAENG – Member [Member id: 126246]
- CSI Membership