**Dr. Pooja Sharma**
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UGC (NET and JRF)
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## AREAS OF SPECIALIZATION

- Digital Image Processing
- Computer Vision
- Pattern Recognition
- Image Retrieval
- Image Reconstruction
- Face Recognition

## PEER REVIEWED INTERNATIONAL PUBLICATIONS

- SCI Journals (Elsevier and Springer) : 8
- International Book: 1
- International Book Chapters: 2
- International Conferences: 4

**SCI Journals (Elsevier and Springer):**

| Sr. no. | International/ National | ISSN No | Paper Title | Journal/ Publisher Name | Impact Factor |
|---------|-------------------------|---------|-------------|-------------------------|---------------|
| 1 | International | 0143-8166 | Improving image retrieval using combined features of Hough transform and Zernike moments | Optics and Lasers in Engineering/ Elsevier | 2.3769 |
| 2 | International | 1051-2004 | Analysis of algorithms for fast computation of pseudo Zernike moments and their | Digital Signal Processing/ Elsevier | 2.337 |

| | | | numerical stability | | |
|---|---|---|---|---|---|
| 3 | International | 0143-8166 | Local and global features based image retrieval system using orthogonal radial moments | Optics and Lasers in Engineering/ Elsevier | 2.769 |
| 4 | International | 0030-3992 | An effective image retrieval using the fusion of global and local transforms based features | Optics and Laser Technology/ Elsevier | 2.109 |
| 5 | International | 1432-1882 | Performance analysis of various local and global descriptors on image retrieval system | Multimedia Systems/ Springer | 2.207 |
| 6 | International | 1555-6212 | On image reconstruction, numerical stability, and invariance of orthogonal radial moments and radial harmonic transforms | Pattern Recognition and Image Analysis/ Springer | - |
| 7 | International | 0030-4026 | Improved shape matching and retrieval using robust histograms of spatially distributed points and angular radial transform | Optik - International Journal for Light and Electron Optics | 0.835 |
| 8 | International | 0975-8887 | An effective image retrieval system using region and contour based features | International Journal of Computer Applications | 0.873 |

**Book:**

Programming in Python, BPB Publications, New Delhi, 2017.

**Book Chapters:**

1. "Radial Moments for Image Retrieval", Real-Time Image and Video Processing, IGI Global, USA, 2017.
2. "Recognition of Face Biometrics", Real-Time Image and Video Processing, IGI Global, USA, 2017.

**Conferences:**

1. Paper presented in IEEE India International Conference on Information Processing, IICIP-2016.
2. Paper presented in International Conference on Recent Advances and Future Trends in Information Technology
3. Participated in International Conference on Information Systems for Indian Languages.
4. Participated in Recent Advances and Future Trends in Digital Image Processing.

## REVIEWER OF INTERNATIONAL JOURNALS

- Knowledge Based Systems (Elsevier).
- IET Computer Vision
- Scientific Research and Essays
- International Journal of Computer Applications in Technology
- International Journal of Computer Applications

## WORKSHOPS PARTICIPATED

- Participated in TEQIP sponsored workshop on Data Analysis and Soft Computing in 2014 at NIT Jalandhar.
- Participated in TEQIP sponsored workshop on Recent Trends in Software Engineering and Knowledge Mining in 2015 at NIT Jalandhar.
- Participated in TEQIP sponsored workshop on Recent Advances in Image and Natural Language Processing in 2016 at NIT Jalandhar.
- Participated in Faculty Development Programme on Research Methodology and Tools for Data Analysis in 2016 at DAV University, Jalandhar.

## WORKSHOPS ORGANIZED

- Organized a 2 days' workshop on Android App Development (13-14 October, 2017) at Department of Computer Science and Engineering, IKGPTU, Main Campus, Kapurthala.

## ACADEMIC ACHIEVEMENTS AND SCHOLARSHIPS

- **Senior Research Fellowship**
  from Punjabi University, Patiala
  Sponsored by University Grants Commission, New Delhi (from November. 2011 to July 2012)
- **Junior Research Fellowship**
  from Punjabi University, Patiala
  Sponsored by University Grants Commission, New Delhi (from November. 2009 to November 2011)
- Various Scholarships for being in merit in Matric, 10+2, Under Graduate and Post Graduate.
- Qualified National Aptitude Test conducted by National Institute of Information Technology.
- Received Governor's Gold Medal by holding 1st position in master degree from Guru Nanak Dev University, India.
- Received several Merit certificates, Gold and Silver medals for all semesters of under and post graduate.

## TECHNICAL PROFICIENCY

- **Programming Languages:** Python, C/C++, Java , Visual Basic, DotNet, Unix shell programming, Prolog
- **Script Languages:** ASP, C#, HTML
- **Database Server:** Oracle8i/9i/10g/11g, SQL Server, MS Access 97/2000, MySQL
- **Platforms/Servers/Tools:** Windows 98/2000/NT/XP/Vista/7/8, Linux, Sun Solaris, MATLAB

## PROJECTS

- **July 2004 to May 2005 in BCA**
  Project          : Fun Site just like SantaBanta.com
  Tools            : ASP, Oracle, Frontpage
- **Jan 2006 to May 2006 in M.Sc. (CS)**
  Project          : Online Examination Site and Exam Schedule
  Tools            : ASP, Oracle, Frontpage
- **Jan 2008 to May 2008 in MCA**
  Project          : Employee Record Management
  Company          : Doordarshan Jalandhar
  Tools            : VB.NET, Oracle

**PREVIOUS SELECTIONS**

- Selected as Assistant Professor in **Panjab University, Chandigarh** in 2012.
- Selected as Assistant Professor in the **Central University of Jammu** in 2013 (permanent basis).

**PREVIOUS EXPERIENCE (10 Years)**

- **Assistant Professor and Coordinator**, Department of Computer Science and Applications at DAV University, Jalandhar, Punjab, India (from August, 2013 to May 2017). (4 years) (3 years as Coordinator of the Department)
- **Assistant Professor**, Department of Computer Science, Guru Nanak Dev University College, Jalandhar (from July, 2012 to May, 2013). (1 year)
- **Senior Research Fellow**, Department of Computer Science, Punjabi University, Patiala (from July, 2011 to July, 2012). (1 year)
- **Junior Research Fellow,** Department of Computer Science, Punjabi University, Patiala (from July, 2009 to July, 2011). (2 years)
- **Lecturer,** Department of Computer Science, Lyallpur Khalsa College, Jalandhar (from July, 2008 to February, 2009). (1 year)
- **Lecturer**, Department of Computer Science, Govt. Arts and Sports College, Jalandhar (from July, 2007 to February, 2008) (1 year)

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**SUBJECTS TAUGHT AT UNDERGRADUATE AND POST GRADUATE LEVELS**

- Programming in C
- Programming in C++
- Programming in Java
- Programming in Python
- Computer Graphics

- Theory of Computer Science
- Data Structures
- Digital Image Processing
- Symbolic Logic and Prolog
- Computer Networks and Data Communication

- Algorithm Design and Analysis
- Network Operating System
- Discrete Mathematics
- Database Management Systems
- Operating Systems

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**CONTRIBUTIONS TO UNIVERSITY**

- Being coordinator of Board of Studies (Computer Applications) designed the course scheme as well as the syllabi of post graduate degree programs; M.Sc. (Computer

Science) two year degree course, Master of Computer Applications (MCA), three years degree course, undergraduate degree course; Bachelor of Computer Applications (BCA), 3 years degree course, and Post Graduate Diploma in Computer Applications (PGDCA).

- Worked as resource person for the establishment of Computer Laboratories in the Department of Computer Science and Applications and Department of English with LAN based Internet facility.
- Coordinator/convener and Member of Board of Studies at IKGPTU and DAV University.

**DATE: 15ᵗʰ June, 2017**                                          **POOJA SHARMA**