CURRICULUM VITAE

Name: Dr. Anamika Ahirwar

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RESEARCH INTERESTS

Medical Imaging Data Mining

TEACHING INTERESTS

Data Warehousing and Mining Image Processing Pattern Recognition Soft Computing Software Engineering
System Analysis and Design
Operating System
Database Management System

EDUCATION

- Ph.D. in Computer Applications, Rajiv Gandhi Technical University, Bhopal, 2013
 Thesis Title: Data Mining Schemes for Medical Imaging
- MCA, Rajiv Gandhi Technical University, Bhopal, 2004, 62.39 %
- BSc., Jiwaji University, Gwalior, 1999, 55.72 %

RESEARCH EXPERIENCE: Engaged since 2006 (07 years)

RESEARCH PROJECTS

- 1. MRI Image Region Classification Using Neuro Fuzzy Technique.
- 2. Automated Tumor Segmentation from MRI Image.
- 3. Image Processing Lab for Medical Image Segmentation.
- 4. Abnormality Detection and Characterization of the Segmented Region of Saggital and Coronal view of Brain MRI Image.
- 5. Soft Computing Techniques for Extraction of Cancer in Medical Image.
- 6. Detection of Melnoma and Non-melanoma using Image Processing Techniques For Skin Cancer.

SUPERVISED B.E., M.C.A, M.TECH. PROJECTS: 50

TEACHING EXPERIENCE: Total 10 years

Taught Graduate and Post Graduate students of Computer Science (M.Tech (CS), B.E.(CS/IT), MCA, BCA, MSc.(CS), PGDCA, BSc.(IT & CS)).

Classes of IGNOU students for last seven years.

Subjects Taught

a) Graduate

Operating System, Software Engineering, System Analysis and Design, Software Project Management, Internet, Networking, Information Technology, Database Management System, OOPS Methodology, Object Oriented Analysis and Design, Application S/W Pacakage, Microprocessor.

b) Post Graduate

Data Warehousing and Mining, Digital Image Processing, System Programming, Data Structure Computer Graphics, Software Engineering, System Analysis and Design, Operating System, Computer Networks, Multimedia, Information Technology.

DETAILS OF TEACHING EXPERIENCE

| Duration | | Institution | Designation | Nature of |
|----------------------|-----------|------------------------|----------------------|--------------|
| То | From | | | work |
| 2005 | 2006 | Govt. Geetanjali Girls | Faculty (Under Govt. | Teaching |
| | | P.G. College, Bhopal | Scheme of Atithi | |
| | | | Vidwan) | |
| 2006 | 2007 | Govt. SMS Model | Faculty (Under Govt. | Teaching and |
| | | Science College, | Scheme of Atithi | Research |
| | | Gwalior | Vidwan) | |
| 2007 | 2008 | GICTS College, | Lecturer | Teaching and |
| | | Gwalior | | Research |
| 2008 | Dec 08 | Govt. KRG College, | Faculty (Under Govt. | Teaching and |
| | | Gwalior | Scheme of Atithi | Research |
| | | | Vidwan) | |
| Dec 08 | Mar10 | Gandhi Vocational | Assistant Professor | Teaching and |
| (Under statue 28(17) | | College, Guna | | Research |
| Mar 10 | Jan 12 | Boston college for | Associate Professor | Teaching and |
| | | professional studies, | | Research |
| | | Gwalior | | |
| Jan 2012 | Till date | Maharana Pratap | Associate Professor | Teaching and |
| | | Colloge of | | Research |
| | | Technology, Gwalior | | |

BOOKS WRITTEN: 01

Title: "Applying Data Warehousing and Mining" (For B.E.(CS/IT), MCA, M.Tech. final year students)

WORKSHOPS ORGANIZED

- Organized a workshop and delivered a talk in the Workshop held from 01/10/09 to 14/10/09 at Gandhi Vocational College, Guna (M.P.) for college students. The workshop consisted of Communication Skills, Group Discussion, Interview Skills, Personality Development, Body Language and integration with Office Particulars.
- 2. Member in administrative committee in National Workshop on the Application of Optimization Techniques in Management and Computer Science in April 4-5, 2013, at Maharana Pratap College of Technology, Gwalior.

COMPUTER SKILLS

Operating Systems: MSDOS, Windows 95/98/NT, Windows XP, 7, 8.

Computer Languages: C/C++, Visual Basic.

Scientific Applications: MATLAB.

Office Applications: Microsoft PowerPoint, Access, Excel, Word.

Internet Development: HTML.

Database: Microsoft Access.

PUBLICATIONS

Research Paper Published in International Journals:

- A. Ahirwar and R.S. Jadon, "Characterization of Tumor Region using SOM and Neuro fuzzy Techniques in Digital Mammography", published in International Journal of Computer Science and Information Technology (IJCSIT ISSN 0975-3826) through Academy and Industry Research Collaboration Center (AIRCC), Vol 3 No.1, PP 199-211, February 2011.
- A. Ahirwar and R.S. Jadon, "Tumor Region Extraction in Cancerous Brain MRI Images", published in International Journal of Computer Information Systems (IJCIS ISSN 2229-5208), through Silicon Valley Publishers, Vol 2 No.4, PP 72-95, April 2011.
- 3. A. Ahirwar and R.S. Jadon, "Evaluation and Comparison of Features of Brain MRI", published in International Journal of Computer Engineering (IJCE ISSN 0975-6116) through Serials Publications, Vol 3 No.1, PP 11-22, (Jan-Jun) 2011.

- 4. A. Ahirwar, "Measure the Effectiveness of an Innovative Scheme for Medical Imaging", published in International Journal of Computer Applications (IJCA ISSN 0975-8887) Vol 37– No.2, PP 1-7, January 2012.
- 5. A. Ahirwar, "Computation of Statistical Features of Brain MR Images", published in Journal of Global Research in Computer Science (JGRCS ISSN 2229-371X) Volume 3, No. 1, PP 45-49 January 2012.
- A. Ahirwar, "Study of Techniques used for Medical Image Segmentation and Computation of Statistical Test for Region Classification of Brain MRI", published in International Journal of Information Technology and Computer Science(IJITCS), ISSN: 2074-9007 (Print), ISSN: 2074-9015 (Online), Vol. 5, No. 5, April 2013, PP 44-53.
- 7. A. Ahirwar, "Process of Extraction of Tumor Region in Brain MRI" has accepted for publication in "International Journal of Information Retrieval".

Research Papers in Conferences:

(A) International Conference

- A. Ahirwar and R.S. Jadon, "Segmentation and Characterization of Brain MR Image Regions Using SOM and Neuro Fuzzy Techniques", published in Proceedings of the First International Conference on Emerging Trends in Soft Computing and ICT (SCIT 2011), organized by Guru Ghasidas Vishwavidyalaya, Bilaspur(C.G.) India, PP 128-131,16-17 March 2011, ISBN NO.-978-81-920913-3-4.
- A. Ahirwar, R.S. Jadon, "Effectiveness of Soft Computing Techniques for Medical Imaging", published in Proceedings in 5th International Conference on Computational Intelligence and Communication Networks (CICN 2013), organized by IEEE Computer Society, 27-29 September 2013 in Mathura, UP, India, PP 336-338, ISBN No.:978-0-7685-5069-5.

(B) National Conferences

- 10.A. Ahirwar, R.S. Jadon, A. Chaturvedi. "Multimedia Data Mining: A Review" in AICTE Sponsored National Conference on Advances in Electrical Engineering AEE 2006, on November 29-30, 2006 in Madhav Institute of Technology & Science, Gwalior, Pages 199-204.
- 11.A. Ahirwar, R.S. Jadon. "A Case Study of Data Mining models for Medical Image Segmentation" in Souvenier in National Conference on Application of Mathematics in Engineering & Technology, on 2-3 February 08 in Madhav Institute of Technology & Science, Gwalior (M.P.), pp 92.
- 12.A. Ahirwar, R.S. Jadon. "Identification of Properties of Tumor Region in Digital Mammograms Using SOM and Neuro Fuzzy Techniques", in Souvenier of the

- National Conference, Jointly organized by IETE and CSI Gwalior on 6-7 March 2010 at DRDE Gwalior, pp 1.
- 13.A. Ahirwar, R.S. Jadon. "Characterization and Segmentation of Brain MRI Using SOM and Fuzzy C-Means", in Proceedings of AICTE Sponsored in National Conference on Emerging Technological Trends, March 19-20, 2010 organized by VNS Institute of Technology, Bhopal (M.P.), ISBN: 978-81-89107-92-5, pp 137-140.
- 14.A. Ahirwar et.al. "Data Mining Techniques for Better Decisions in Human Resource Management Systems in Information Technology", in Proceedings of the 3rd CSI National Conference on Education and Research in Information Technology, March 6-7, 2010 in Jaypee Institute of Engineering and Technology, Raghogarh, Guna, ISBN: 978-0230-32925-6, pp 367-374.
- 15.A. Ahirwar et.al. "Problem of Software Engineering and Human Resources in India and Impact of Globalization", in Proceedings of the 3rd CSI National Conference on Education and Research in Information Technology, March 6-7, 2010 in Jaypee Institute of Engineering and Technology, Raghogarh, Guna, ISBN: 978-0230-32925-6, pp 71-77.
- 16. A. Ahirwar, "The Case study of the effect of E-waste in Environment", in National Seminar on New Horizons In Environment & its Derived Problems on February 3rd 4th 2006 in Govt. Geetanjali Girls P.G. College, Bhopal.

PROGRAM COMMITTEE MEMBER / EDITORIAL BOARD MEMBER

- 1. As a member in Editorial Board in International Journal of Computer Science & Information Technology (IJCSIT), 2012.
- 2. Program Committee in International Conference on Signal, Image Processing and Pattern Recognition, SPPR-2013 (Delhi, India).
- 3. As a member in Editorial Board in International Journal of Computer Science & Information Technology, 2013, ISSN: 0975-3826 (ONLINE); 0975-4660 (PRINT).
- 4. As a member in IET image processing, 2013.
- 5. As a member in Editorial Board in Physica Medica: European Journal of Medical Physics, 2013.
- 6. As a member in Editorial Board in Journal on Business Economics, Commerce & Trade Management (JBECTM), 2013.
- 7. As a member in Editorial Board in International Journal of Advanced Research in Business Management and Administration, 2013.

- 8. As an Associate Editor in International Journal of Computer Science and Business Informatics (IJCSBI), 2013.
- 9. As a member in Editorial Board in AMERICAN series, BRITISH series and International series (Publication Icon), 2013.
- 10. As a program committee member/Reviewer of "Third International conference on Advanced Computer Science and Information Technology (ICAIT-2014)" to be held in Sydney, Australia.
- 11. As a program committee member/Reviewer of "Third International Conference on Digital Image Processing and Vision (ICDIP-2014)" to be held in Sydney, Australia.
- 12. As a program committee member/Reviewer of "Fifth International Conference on VLSI 2014" to be held in Chennai, India.
- 13. As a program committee member/ Reviewer of "Second International Conference of Networks and Communications (NC 2014)" to be held in Sydney, Australia.
- 14. As a program committee member/Reviewer of "Third International Conference on Signal, Image Processing and Pattern Recognition (SPPR 2014)" to be held in Chennai, India.

REVIEWED PAPERS

- 1. B.Gosavi et al. Virtual Reality Using Interior Design. International Journal of Computer Science & Information Technology (IJCSIT), 2012, ISSN 0975 3826.
- 2. R.Sharma and A.Kumar. Load Balancing in Cloud Computing System. International Journal of Computer Science & Information Technology (IJCSIT), 2012, ISSN 0975 3826.
- 3. J. Pathak and S. Patel. Indecisive Data Classification For Discriminative Patterns Mining Using SVM. International Journal of Computer Science & Information Technology (IJCSIT), 2013, ISSN 0975 3826.
- 4. A.Soni and S.Patel. Semantic Retrieval Technique Based On Domain Ontology. International Journal of Computer Science & Information Technology (IJCSIT), 2013, ISSN 0975 3826.
- 5. Information Technology In Nigerian Quantity Surveying Firms. ITRJ, 2012.
- 6. D.Joseph. Comparative Analysis of Classifying Data with SVM and Random Forest, 2013.
- 7. U.Javed et al. Fuzzy Logic and Active Contour based Medical Image Segmentation, Elsevier, 2013.
- 8. V.Seenivasagam et al. Inversion Attack Resilient Zero-Watermarking Scheme for Medical Image Authentication. IET Image Processing, 2013.
- 9. Identity Identification and Contactless Technology Using near Field Communication (NFC). Pubicon, 2013.

- 10. Performance Analysis of Immune Algorithm for SVM Optimization in Automated Detection of Brain Tumour, IET Image Processing, 2014.
- 11. ROI-Based Fragile Medical Image Watermarking Technique for Tamper Detection and Recovery, IET Image Processing, 2014.
- 12. A Hybrid License Plate Extraction Method Based on Vertical Edge Detection and Adaptive Thresholding, INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY, 2014.
- 13. An Optimized CBIR Using Particle Swarm Optimization Algorithm, International Journal of Computer Science and Business Informatics, 2014.
- 14. ROI-Based Fragile Medical Image Watermarking Technique for Tamper Detection and Recovery, IET Image Processing, 2014.

REFERENCES

Dr. R.S. Jadon

Professor & Head **Department of Computer Applications** MITS Gwalior (M.P.) - 474005

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