# Dr. H L SHASHIREKHA

#### **Associate Professor**



# **Educational Details**

#### Ph.D (2010)

Title: Ontology-based mining for the recognition and classification of conceptually similar documents

**M.Sc (1990-1992)** Master of Science in Computer Science from University of Mysore. Secured 71.21% of Marks

**B.Sc (1987-1990)** Bachelor of Science in Physics, Electronics and Mathematics from University of Mysore. Secured 69.77% of Marks

#### Additional

Qualified in National Education Test (1996) accredited by UGC, which is mandatory for any faculty position in Universities

# Professional Experience

**August 2011 onwards** – Associate Professor, Department of Studies in Computer Science, Mangalore University, Mangalore.

**August 2008 to August 2011** - Selection Grade Lecturer, Department of Studies in Computer Science, Mangalore University, Mangalore.

**August 2003 to August 2008** – Senior Scale Lecturer, Department of Studies in Computer Science, Mangalore University, Mangalore.

**August 1997 to August 2003** – Lecturer, Department of Studies in Computer Science, Mangalore University, Mangalore.

# **Professional Recognition**

- 1. Involved in framing syllabus for M.Sc (Computer Science) and M.Sc (Information systems), Mangalore University
- 2. Assisted the Chairman of the Department of Studies in Computer Science, Mangalore University in designing and implementing M.Sc (Computer Science), M.Sc (Information Systems and M.C.A (Master of Computer Applications) programmes
- 3. Have been guiding several M.C.A, M.Sc (Computer Science) for project works
- 4. Served as member of Board of Examiners (PG) in Computer Science, Bioinformatics and Chairperson, Board of Examiners (PG) in Computer Science, Mangalore University

- 5. Served as external member of Board of Studies (UG) in Computer Science of University of Mysore, and Board of Examiners (UG & PG) of University of Mysore and Bangalore University
- 6. Have been a member of the selection committee, admission to M.Sc (Computer Science) and M.C.A (Master of Computer Applications) programmes of Mangalore University
- 7. Have been actively involved in teaching PG programs such as M.Sc (Computer Science) and M.C.A (Master of Computer Applications)

# Research Recognition

- 1. Presented papers in National and International Conferences
- 2. Published papers in National and International Conferences and Journals
- 3. Guided several projects at M.Sc / M.C.A / M.Tech level

# Research Scholars working towards Doctoral Degree: 07

# **Research Topics**

- 1. Query-By-Humming based Music Information Retrieval System for Indian Music
- 2. Parallel-Incremental: Learning for the Classification of Text Documents
- 3. Classification of XML documents
- 4. Natural Language Processing of Kannada documents
- 5. Data mining techniques for the analysis of gene expression data for the classification of lung cancer

### Member of Academic Bodies

- Member of Faculty of Science & Technology, Mangalore University
- Member of Board of Examiners (UG & PG)
- Member of Board of Studies (PG)
- Member of Local Inspection Committee

#### **Extension work**

- Served as Treasurer of Vishwamangala Education Society from October 2005 November 2008
- Coordinator of the Day Care Center, Mangalore University since February 2009
- Serving as Secretary of Vishwamangala Education Society from November 2009
- Warden, Working Women's Hostel, Mangalore University from January 31<sup>st</sup> 2011 to January 31<sup>st</sup>
  2013
- Warden, University Hostel for Women, Mangalore University from December 5<sup>th</sup> 2012

## **Areas of Interest**

#### **Academic Interest**

Data Structures, Analysis and Design of Algorithms, Compiler Design, Theory of Computation, Object Oriented Programming, Operating systems, Bioinformatics

## **Research Interest**

Text Classification, Text mining, Semantic Web, Bioinformatics, Document Image Processing

### **Research Publications**

# **In International Journals**

- 1. "Content and Structure Based Classification of XML Documents", In International Journal of Machine Intelligence, Vol. 3(4), pp. 376-380, 2011.
- 2. "Text Matching A Case Study of Unnatural Language Text Document", In International Journal of Information Science & Application, pp.531-537, Vol. 2, No. 3, 2010.
- 3. "Constructing Domain Ontologies for Unstructured Text Documents: A Bootstrapping Approach", In International Journal of Information Processing, Vol. 4 No. 1, pp. 9-21, January 2010.
- 4. "Segmentation and labeling of Domain Specific Unstructured Documents: A Heuristic Approach Based on Cues", In International Journal of Computer Science and Information Technology, Vol.1, No.2, pp.85-92, December 2008.
- 5. "Hierarchical Representation for a Classified Page of a Newspaper". In International Journal of Systemics, Cybernetics and Informatics, pp. 66-72, Jan 2008.

# In International Conference Proceedings

- 1. "Using Ontology for Domain Specific Information Retrieval", *In Proc. of 2<sup>nd</sup> International Conference on Digital Image Processing (ICDIP 2010),* Edited by Jusoff, Kamaruzaman; Xie, Yi. Proceedings of the SPIE, Volume 7546, pp. 75463J-75463J-7, Singapore, February 2010.
- 2. "Matching Unnatural language Text Documents", In Proc. of IEEE Bangalore Section -18th Annual Symposium on Emerging Needs in Computing, Communication, Signals and Power, ENC2SP 2009, Bangalore, August 2009. (Best paper award for the session).
- 3. "Ontology based similarity measure for Text Documents", *In Proc. of International Conference on Signal & Image Processing, ICSIP 2009*, Mysore, pp. 602-606, August 2009.
- 4. "Constructing Domain Ontologies for Unstructured Text Documents: A Bootstrapping Approach", *In Proc. of 3<sup>rd</sup> International Conference on Information Processing ICIP'09*, Bangalore, pp.3-12, August 2009.
- 5. "Segmentation of domain specific unstructured documents: A heuristic approach based on cues". *In Proc. of International Conference on Cognition and Recognition ICCR'08*, Mysore, pp.114-119, April 2008 (Best paper award for the session).
- 6. "Ontology Based Structured Representation for Domain Specific Unstructured Documents", *In Proc of International Conference on Computational Intelligence and Multimedia Applications ICCIMA'07* at Sivakasi, Tamilnadu, India, pp.50-54, December 2007.
- 7. "Re-Construction of a Tree from its Preorder Traversal", *In Proc. of International Conference on Advances in Computer Vision and Information Technology ACVIT-07*, at Aurangabad , Maharastra, India, pp.1095-1099, Nov 2007.
- 8. "Segmenting and Labeling a Classified page in a newspaper". *In Proc. of IEEE-International conference on Signal and Image Processing (ICSIP)-2006* held at BVB College of Engineering & Technology, Hubli, India, pp.604-609, Dec 2006.

- 9. "Taking ICT to the rural women", *In Proc. of International Conference on Gender Issues in E-society* (WIT 2005), Annamalai University, Tamilnadu, India, Dec 2005 (Presented the paper)
- 10. "World Wide Web An intelligent and user friendly digital library", *In Proc. of 4<sup>th</sup> International Convention CALIBER 2006 on Dynamic Interoperable Web based Information Systems*, Gulbarga University, Gulbarga, Feb 2006 (Presented the paper)

## **In National Conference Proceedings**

- "Preservation of Digital Data: Need of the Day", In Proc. National Conference on Knowledge, Knowledge Banks and Information Networking, National Institute of Technology, Karnatak, Suratkal, April 2010.
- 2. "Retrieval of information from a classified page", In First National Conference on Image Processing, Computer Vision and Pattern Recognition, organized by PES College of Engineering, Mandya, August 2009.
- 3. "Information and Communication Technology in Educational institutions: A Case study of Mangalore University", In SETRAD, Thiruchirapalli, Feb 2005.
- 4. "Connecting rural women to the world: An Indian Experience", In National Seminar on Women in Science and Technology: Issues and Prospects (WISTIP 2005), Dept of Humanities and Social Sciences, National Institute of Technology, Rourkela, Jan 2005.
- 5. "Text Mining A new perspective in Document Analysis: An overview", *In Proc. of National Conference on Document Analysis and Recognition*, PES College of Engineering, Mandya, July 2003. (Presented the paper)

#### 9.4 Book chapter

1. "Impact of Student Internet world – 2004 on school children- A study in Mangalore Taluk". A Book Chapter in "Children Youth and Electronic media" edited by Dr. Subhash R.Joshi, Nov 2005.