

Faculty Profile

Name Dr. Shashikala
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N.R.Colony,
Bangalore 560050
Mobile Number 9972172175
e-mail hebbbar.shashikala@gmail.com
Qualification B.E, M.Tech, Ph.D
Current Designation Professor & Head
Area of specialization Network Security, Algorithms, IoT,
Cloud Computing
Date of Joining BNMIT 23.08.2004
Nature of Association Regular
(Regular/Contractual/Adjunct)
No. of years of Experience Teaching: 14.11 years
Industry: 8 years



Academic Qualifications

Degree	Institution	Month and year of passing	% of Marks
Ph.D	Research Center, BNMIT	Jan -2018	-
M.Tech (CNE)	BMSCE, Bangalore	July -2007	69.5%
B.E(CSE)	BMSCE, Bangalore	June-2003	79.5%

Work Experience Details

Sl. no	Designation	Institution/Organization/ Company	Duration
1.	Professor & Head	ISE, BNMIT, Bengaluru	15-July-2019 to till Date
2.	Professor	BNMIT, Bengaluru	1-June-2018 – 13-July-2019
3.	Associate Professor	BNMIT, Bengaluru	2012 - 2018
4.	Assistant Professor	BNMIT, Bengaluru	2011 - 2012
5.	Senior Lecturer	BNMIT, Bengaluru	2008 - 2011
6.	Lecturer	BNMIT, Bengaluru	2003 - 2007

7.	Lecturer	DBIT, Bengaluru	2003 - 2004
8.	Teaching Assistant	CMRIT, Bengaluru	2001 - 2003
9.	Corporate Trainer	VRTC, Bengaluru	2000 -2001
10.	Faculty and Project head	APTECH Ltd, Bengaluru	1998 -2000
11.	Faculty and Training Head	NICE, Bengaluru	1996 -1998

Subject taught within the Syllabus:

Networks, Communication, Algorithms, Data Structures, Automata Theory and Computability, Compiler Design, Data Structures, Advanced Algorithms, Wireless Sensor Network, Internet of Things, Unix Shell Programming, Unix System Programming, Unix Internals.

Research Experience Details:

M. Tech:

Device Driver for LCD display in Linux: This work aims at helping the partial blind people who can see bright display and bigger in size. The LCD device is not recognized in the LINUX OS. In this work, the device driver for LCD is written and the hardware is designed to display the information on device. When an user keys in the information that is sent to the LCD device through com port.

Ph.D:

Currently, security issues have become a major bottle neck in the efficient and effective design of WSN. New form of attacks is being introduced to capture sensitive information generated by sensor nodes. Security threats are being imposed at all levels of network architecture. Routing is one of the important aspects of WSN. It is essential to perform efficient and effective routing which also conserves node energy. Unfortunately, many attacks have been introduced currently, at the routing level and many more new forms of attacks are expected at the routing level. Hence, it is of paramount importance to include effective security features during the design of routing protocols.

Heterogeneous WSN have become popular because of recent application demands and their effectiveness in conserving node energy. The existing routing protocols for homogeneous WSN need to be adapted for heterogeneous WSN because they have different network properties compared to homogeneous WSN. Even, heterogeneous WSN are prone to all the major security threats seen in homogeneous WSN. Hence, routing algorithms designed for heterogeneous WSN should include effective security features.

Academic Positions and other Responsibilities:

1. **PG Coordinator for CSE/CNE from (2016 to 2018):** As a PG coordinator, I have organized various workshops, framed guidelines for their internship and project. Designed and developed various rubrics for the evaluation of the project and technical seminars.
2. **CSI Coordinator:** In this venture, I have conducted a workshop for first year students on booting and assembling of system, for 2nd year students on designing a Web site using homesite and for the 3rd year student's hands on network lab.
3. **Innovative Project Lab(IPL) Coordinator:** The IPL is an innovative project competition, which will be conducted in the college for all braches which is sponsored by EDC cell. Students are motive by to work in innovative projects. The one team got the best innovative project award.
4. **NBA:** In NBA I have worked towards developing, documenting and proof collection for Vision, mission and program educational objectives, Teaching Learning Process, and in course outcome and program outcome. I am also a Scrutinizer, PAAC member and DAB member in the department.
5. **T5:** T5 (Time,Tidy,Transform,Truth,Think) is non-technical activity conducted for students of first, second and third year students to improve their teamwork, time management, group activity. I am involved in this to guide the students to motivate towards their carrier.

Awards/ Achievements/Memberships:

1. **Sponsored Projects Undertaken from** Karnataka State Council for Science and Technology (KSCST), Indian Institute of Science, Bangalore (Government of Karnataka) sponsored Final Year Projects at ACSCE for the Academic Year 2014-15, under Students Project Proposal-SPP: 38th series.
2. Microsoft Certified Developer (in Visual Basic).
3. Certified JavaScriptProgrammer fromBrain bench the measure of achievement.

Editorial Board Member

1. Reviewer in IEEE sensor Journal.
2. Editorial Board member for International Journal of Recent Trends in Cloud Computing and Web Engineering.
3. Editorial Board member for International Journal of Network Security and Data Mining.
4. Editorial Board member for International Journal of Internet and Networking
5. Editorial Board member for Scibay International Journal of Science Engineering Technology and Management.

Professional Memberships:

- Life Member, Indian Society for Technical Education (ISTE) **LM38493**.
- Member, Computer Society of India

Workshops /Seminars Organized:

1. Convener for Faculty Development Programme on Biomedical Signal Processing at BNMIT 11th-15th June 2018.
2. Mobile Development Application programme, short-term course was organized for Postgraduate students.
3. Member of organizing committee for one week FDP on “Storage Area Network: Configuration and management simplified” from 19th – 23rd Jan 2015.

Research Publications:

I. National & International Journals

1. Arathi S M, Shashikala and et al., “Building A Simple Test Bed For WSN” published in the International Journal of Latest Trends in Engineering and Technology, Vol. 5 Issue 4 July 2015, pp 377-384.
2. Swathi.K.A, Shashikala “PULSE: A Health Monitoring Solution for Astronauts Utilizing Big Data and Machine Learning Methodologies”, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 6, Issue 5, May 2017 pp 9026-9032.
3. Aishwarya A S, Shashikala “Performance Analysis of C4.5 and SVM Algorithm using MapReduce”, International Journal of Current Trends in Engineering & Research (IJCTER) e-ISSN 2455–1392 Volume 2 Issue 8, August 2016 pp. 17 – 22, Scientific Journal Impact Factor : 3.468.
4. Rini Harshita, Shashikala, “An Efficient Data Acquisition in Wireless Sensor Network for a

Transfaultry Network”, International Journal of Trend in Research and Development, Volume 4(4),pp526-531, Jul-Aug 2017.

5. Vinay B M S, Smt. Shashikala,“TRAFFIC MANAGEMENT USING LOW ENERGY BLUETOOTHTECHNOLOGY”, International Journal of Recent Trends in Engineering & Research (IJRTER),Volume 02, Issue 08; August - 2016 [ISSN: 2455-1457].
6. Ramyavathsala C V, Dr. Shashikala“saraNi – An IoT based pathfinder” published in International Journal of Advance Research, Ideas and Innovations in Technology, Vol 4, iss 3, June 2018.
7. Vidyarani K , Dr. Shashikala, “Nitrogen content in rice leaf and weed in the crop row” , published in International Journal of Advance Research, Ideas and Innovations in Technology, Vol 4, iss 3, June 2018

II. National/International Conference Proceedings

1. Shashikala, Kavitha C, “Secured Cluster based Data integrity Routing protocol for WSN” Published in the proceedings by Springer, Digital life - 2015.
2. Shashikala, Kavitha C,“A Survey on Secured Routing Protocol for WSN” published in Computing, Communication & Networking Technologies (ICCCNT), 2012 Third International Conference.
3. Shashikala, Kavitha C, “A Secured Alternative path Routing Protocol against DoS attack”, presented in Eleventh International conference WOCN-2014, in Guntur, AP date of Conference 11th Sept -2014 to 13th September 2014. Published in IEEE Xplore
4. Shashikala, Kavitha C, “Secure Data Integrity Routing for Wireless Sensor Networks” ICAECC-2014, Bangalore, Conference Date 10th and 11th October 2014. Published in IEEE Xplore.
5. Shwetha.M,Shashikala and et al., “A SURVEY ON CLUSTER BASED ENERGY EFFICIENT ROUTING PROTOCOLS “ ICRBIT-2015, Bangalore, Published in ELK-Asia Pacific Journals, ISBN:978-81-930411-5-4
6. Navyashree.TM , Shashikala “SURVEY ON DELAY TOLERANT NETWORK “ ICRBIT-2015, Bangalore, Published in ELK-Asia Pacific Journals, ISBN:978-81-930411-5-4

Invited Talks Delivered:

1. “**Faculty Development Programme on Web Technology**”: at RNSIT, Bangalore, presented Talk on PERL programming for faculties from various engineering colleges, 27th – 30th July 2009.
2. “**Web Development using Homesite Tool**”: at BNMT, Bangalore.

Participation in Training courses/Seminars/Workshops

1. Completed a course of study offered by IITBombayX, an online learning initiative of Indian Institute of Technology, Bombay on “Technical Communication for Scientists and Engineers” 11th Jun - 02 May 2016.
2. ISTE workshop on Introduction to algorithms by IIT Bombay, in the Remote center BMSCE, 30th June - 5th July 2014.
3. Introduction to Design of algorithm conducted by IIT Kharagpur from 27th April - 24th May 2015.
4. Innovative Teaching Methods conducted by National Institute of Technical Teachers Training and Research, Chennai from 18th- 23 July 2016.
5. “Simulation of wired and wireless Networks” in NITK from 8th- 10th June 2015.
6. Massively Empowered classroom a research project from Microsoft research at Microsoft Research, Bangalore on 18th Jan 2013.
7. Innovative teaching and effective communication at BNMIT from 18th – 20th July 2012.
8. Finite automata and formal languages at Rajarajeswari college of Engineering in association with Pearson on 3rd September 2010.
9. Teaching Finite automat and formal language at PESIT from 26th -27th July 2010.
10. Computer network simulator(Netsim) workshop at BIT in association with TETCOS from 14th – 15th June 2005.
11. Mission 10X conducted by ISTE in association with Wipro Technologies from 19th- 23rd July 2010.

Personal Details:

- **Date of Birth:** 21 - 01 –1975
- **Family Details:**
 - **Husband:** Sathisha V Hebbar
 - **Daughter:** Samanvitha S Hebbar

17-July-2019

Dr. SHASHIKALA