

## **Dr. Roopa G M**

Associate Professor  
CSE Department, BIET.

### **Address:**

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## **Objective**

Aiming at excellence in the working field through hard work, dedication and honesty in a challenging environment.

## **Research Interests**

- Artificial Intelligence
- Machine Learning
- Blockchain
- Cloud Computing
- Big Data Analytics

## **Academic Profile**

- Ph.D. in Computer Science and Engineering from Visvesvaraya Technological University, Belagavi in the year 2018-2019.
- M.Tech. with specialization in Computer Science & Engineering from BIET Davangere in year 2008 under Visvesvaraya Technological University, Belagum.
- B.E with specialization in Electronics & Communication from BIET, Davangere under Kuvempu University.

## **Teaching Experience**

- Presently working as Associate Professor in the Department of CS&E, BIET, Davangere from 01/07/2019 to till date.
- Worked as Assistant Professor in Department of CS&E, BIET, Davangere from 01/09/2012 to 30/06/2019.
- Worked as a lecturer in Department of CS&E , BIET, Davangere from 04/08/2008 to 31/08/2012.

## Professional Memberships

- Indian Society for Technical Education (ISTE) - Lifetime Membership: LM 59768
- Life Member of International Association of Engineers (IAENG) LM 186019
- Computer Science Teacher Association (CSTA) – 198357999427
- Institute of Engineers: 1681642
- ORCID Member: Connecting Research/Researchers - 0000-0001-5451-5972

## Corporate Experience

- Worked as a trainee at Tata Consultancy Services Ltd, Bangalore for 1.5 years.

## Major Achievements

- **“Best Paper Award”** for the paper titled “Mobile Agent Framework for Web-Advertising” during National Conference on “Recent Advances in Electronics and Communication Engineering” held at BIET, Davangere on 13th Oct 2017.
- **“Session Best Paper”** for the paper titled “Security for e-Advertising using Digital Watermarking and Mobile Agents” during the 3rd International Conference on Electronics, Computer and Manufacturing Engineering (ICECME’2016) held at Dubai (UAE) on Oct. 9th - 10th, 2016.
- Received Certification of Appreciation for being a jury member and guiding the other college students as a part of “BITES – Xcelerator Student Project Awards, 2020”.
- Awarded as “Best Mentor” from Infosys for outstanding performance in the Campus Connect Activities in the year 2011.
- Received the **“Certification of Appreciation”** for participating in the “The Great Mind Challenge–2011” an Annual National Software Development Program by IBM.
- Selected to present the posters on Software Engineering (SDLC Phases) during the Mission10X Conclave-2011, held at Dayananda Sagar College of Engineering, Bangalore on 19th Aug 2011.

## Subjects Handled

Robotic Process Automation, User Interface Design, Big Data Analytics, Web Technology and its Applications, Storage Area Network, Cloud Computing, Data Mining & Data Warehousing, Java & J2EE, Web 2.0 and Rich Internet Applications, Computer Networks, Software Engineering, Operating System, Unix System Programming, Unix Shell Programming, Design and Analysis of Algorithms, Management & Entrepreneurship, Programming in C, Objected Oriented Programming in C++.

## Additional Roles @ BIET & Other Institutions

- Dean IT Cell from August 2021 to till date.
- Institute webmaster [www.bietdvg.edu](http://www.bietdvg.edu) since June 2013 till Aug 2020.
- Department NBA coordinator.
- Member for Skill Development Team.
- Part of AICTE Compliance work.
- Department coordinator for Placement & Training Program from Aug 2018 to June 2021
- Internship and Project Coordinator in the Department from 2018 to June 2021
- Maintained ISTE Karnataka Section website [www.istekarnataka.com](http://www.istekarnataka.com) for a duration of 2 years (2015 & 2016).
- Department Forum Coordinator from Aug 2013 till date.
- Member of Anti-Ragging Squad Committee.

- Chaired the Sessions on “Theoretical Computer Science” and “Applications of Communication” during the International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT- 2015) held at BIET, Davangere during 29th to 31st Oct 2015.
- Lady-Convener for Students’ Academic Council during the year 2013-14.
- Lady-Convener for VTU Youth Festival – 2014, held at BIET Davangere.

## Patents

- Intelligent Mobility Robotic Device for Locomotion of Physically Challenged People.  
(Application No.:202141008444 Filing Date: 01/03/2021 Publishing Date: 05/03/2021)
- Artificial Intelligence Based Internet of Vehicles ( IoV) System to Prevent Road Accidents  
(Application No.: 202141011709, Filing Date: 19/03/2021, Publishing Date: 26/03/2021)
- Sensor Based Intelligent System to Detect Black Fungus Infection among Covid Recovered Patients.  
(Application No.: 202141023345 Filing Date:25/05/2021, Publishing Date: 18/06/2021)

## Book Chapter

- Roopa G M, Arun Kumar G H, Naveen Kumar K R and Nirmala C R have published chapter titled “Optimized Data Mining Techniques for Outlier detection, removal and Management Zone Delineation for Yield Prediction” in book title "Modern Techniques for Agricultural Disease Management and Crop Yield Prediction" by IGI Global publishers, USA. Release Date: August, 2019 Pages: 291, ISBN13: 9781522596325 ISBN10: 1522596321 EISBN13: 9781522596349 DOI: 10.4018/978-1-5225-9632-5.
- Roopa G M, Pradeep N, Arun Kumar G H have published chapter titled “AGRO-CHAIN: Blockchain Powered Micro-Financial Assistance for Farmers in book titled “Block Chain based Security Solutions for Big Data and IoT Applications”, Apple Academic Press , CRC Press , a Taylor and Francis Group. The book is in production phase. (<https://www.appleacademicpress.com/applications-of-blockchain-and-big-iot-systems-digital-solutions-for-diverse-industries/9781774637456>)
- Roopa G M, K. Shryavani, N. Pradeep, Vicente Garcia Diaz have published chapter titled “Accelerating Medical Research: Digital Healthcare” “Advanced AI Techniques and Applications in Bioinformatics” Apple Academic Press, CRC Press, a Taylor and Francis Group. Book is in production phase. (<https://www.routledge.com/Advanced-AI-Techniques-and-Applications-in-Bioinformatics/Gaur-Solanki-Wamba-Jhanjhi/p/book/9780367641696#toc>)
- G M Roopa , Chethana Prakash, N Pradeep have submitted chapter titled “Computer Vision Based Assistive Technology for Blind and Visually Impaired People: A Deep Learning Approach ” under book titled “Computer Assistive Technologies for Physically and Cognitively Challenged Users”, to be published by Bentham Science. (The book is in review phase.)

## List of Publications

### International Journals:

- K. Shrivani and Roopa G M “Sentiment Analysis On Amazon Kindle Store Reviews” published in International Journal Of Current Engineering And Scientific Research (IJCESR) ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-8, ISSUE-6, 2021.
- Radhika Patil and Roopa G M “Overview of Customer Churn Analysis in Telecom Industry published in International Journal Of Current Engineering And Scientific Research (IJCESR) ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-8, ISSUE-6, 2021
- Roopa G M and Nirmala C R “Intelligent Bot architecture for e-Advertisements” “Integrated Intelligent Computing, Communication and Security” Studies in Computational Intelligence (SCI Springer series) pp 21-31, Volume-771 Sep 2018.
- Roopa G M and Nirmala C R “Intelligent Mobile Agent Framework for Searching Popular e-Advertisements” “Advances in Intelligent Systems and Computing” (AISC-Springer Series) , volume-714, pp 177-189, July 2018, ISBN 978-981-13-0224-4.
- Roopa G M and Nirmala C R “A Hospital Queuing Recommender System for Predicting Patient Treatment Time Using Random Forest Algorithm” in International Journal of Engineering and Manufacturing Science, ISSN 2249-3115 Volume 8, Number 1 (2018) pp.119 -133.
- Sindhu and Roopa G M “A Survey-Approaches and Challenges for Cloud Based Recommendation System” International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Volume 3 , Issue 3 , May 2018, ISSN : 2456-3307.
- Roopa G M and Nirmala C R “Mobile Agent Framework for Web-Advertising” in International Journal of Engineering and Manufacturing Science, ISSN 2249-3115 Volume 8, Number 1 (2018) pp. 105-117.
- Roopa G M and Nirmala C R “Performance Evaluation of e-Advertising Framework using Intelligent Mobile Agents” International Journal of Applied Engineering Research, ISSN: 0973-4562 Volume 12, Number-17 (2017) pp.6870-6880 (Scopus Indexed).
- Roopa G M and Nirmala C R “Optimized Ad-Scheduling for e-Advertising using Concurrent Mobile Agents” International Journal of Current Engineering and Scientific Research in volume-4, Issue 11, pp 33-43, 2017, ISSN: 2394-0697.
- Nagalakshmi and Roopa G M “Bandwidth Efficient: On-Demand Multimedia Advertisements Using Mobile Agents” is published in International Research Journal of Engineering and Technology Volume: 04 Issue: 10, Oct -2017 ISSN: 2395-0056.

- Sindhu and Roopa G M “Online Blood Bank Management System” is published in International International Journal of Scientific Research in Computer Science, Engineering and Information Technology, volume 2 Issue 5 , ISSN : 2456-3307.
- Sindhu and Roopa G M “A Survey: Smart City Services” is published in International Journal Engineering Science and Computing , ISSN: 2321-3361,volume-7 Issue No. 5 , May 2017.
- Roopa G M and Nirmala C R “Security for e-Advertisements using Digital Watermarking and Mobile Agents” is published in “International Journal of Computing , Communication and Instrumentation Engineering (IJCCIE)” Vol-3, Issue-2 (2016) ISSN:2349-1469, EISSN: 2349-1477.

#### **National / International Conference:**

- Roopa G M presented a paper through skype entitled “Efficient Bandwidth Allocation for on-Demand Multimedia Advertisements using Mobile Agents” in 2nd International Conference on Recent Multidisciplinary Research (ICRMR 2018) organized by Foundation of Innovative Research on 23rd- 24th Nov 2018 at Asian Institute of Technology Conference Centre, Pathum Thani, Thailand.
- Roopa G M participated and presented paper titled “Intelligent Bots Architecture for e-Advertisements” during the “Second International Conference on Integrated Intelligent Computing, Communication & Security (ICIIC-2018)” on 24th and 25th of January 2018 organized by the Dept. of CS&E, SJBIT, Bengaluru. The paper will be published by Springer in the “Advances in Intelligent Systems and Computing” series and indexed in Scopus and dblp.
- Roopa G M participated and presented paper titled “Intelligent Mobile-Agent Framework for Searching Popular e-Advertisements” during the 2nd International conference on “Advanced Computing and Intelligent Engineering (ICACIE-2017)”, Organized by Central University of Rajasthan , Ajmer-INDIA (Springer Series).
- Roopa G M participated and presented paper titled “Mobile Agent Framework for Web-Advertising” in National conference on “Recent Trends in Electronics and Communication Engineering” organized by the Department of Electronics and Communication Engineering , BIET- Davangere on 13th Oct 2017. Received the “Best Paper Award”.
- Roopa G M participated and presented paper titled “A Hospital Queuing Recommender System for Predicting Patient Treatment Time using Random Forest Algorithm” in National conference on “Recent Trends in Electronics and Communication Engineering” organized by the Department of Electronics and Communication Engineering , BIET- Davangere on 13th Oct 2017.
- Roopa G M participated and presented paper titled “Security for e-Advertisements using Digital Watermarking and Mobile Agents” during the “3rd International Conference on Electronics, Computing and Manufacturing Engineering (ICECME' 2016)” held at Dubai (UAE) on 9th and 10th Oct 2016, organized by Universal Researchers In Engineering(URENG) . Received the “Session Best paper”.

- Roopa G M participated and presented paper titled “Twitter Data Analysis for Unemployment Crisis” during IEEE-2015 Technically Sponsored “International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT)”, held at BIET on 29th to 31st Oct 2015.

## **Seminars/Workshops/Events Organized**

- Coordinated “PCAP- Programming Essentials in Python by Cisco Netacad” organized by ICT Academy in association with CISCO NETACAd from 05/02/202 to 05/03/2021
- Coordinated ICT Academy & Salesforce Programs - Become Job ready for Salesforce Developer 2-month free learning platform journey (92 hours) free for Final and pre-final year students from 30/07/2020.
- Actively involved in organizing one-day “Social Service: Visited Government School” at Jarikatti to give awareness on computer skills, provisions for applying scholarships, online competitive exams available and health awareness session for girls students.
- Actively involved in organizing one-Day Industry AI workshop on “Machine Learning to Deep learning” conducted by BCIC (Bangalore Chamber of Industry Commerce) in association with IBM Research AI for 6th Sem CS/IS students from various colleges on 23th Feb 2019 at BIET, Davangere.
- Actively involved in organizing 3-Day workshop on “Fundamentals of Declarative App Building using Salesforce Lightning Platform” in association with Salesforce for 3rd year CSE students from 9th Nov to 11th Nov 2018.
- Actively involved in organizing 2-Days Bootcamp and 24-Hrs non-stop Hackthon on “Building Chat-Bots using IBM Watson Assistance” conducted by Smart-Bridge in collaboration with IBM on 11th , 12th and 13th of Oct 2018 at BIET.
- Actively involved in organizing “Mock Skype Interview” for TCS selected final year students on 10th Sep 2018.
- Actively involved in organizing 24 hrs non-stop “Learnthon – Student Championship 2018” conducted by Salesforce in association with ICT-Academy hosted by Dept. of CSE, BIET Davangere on 2nd and 3rd Feb 2018.
- Organizing Committee member for the IEEE Technically Sponsored International Conference on “Applied and Theoretical Computing and Communication Technology” held on 29th to 31st Oct 2015 at BIET, Davangere.
- Regularly involved in organizing Certification Courses on IBM Tools like: RAD, RFT, Tivoli, DB2 and LOTUS
- Regularly involved in organizing “Infosys Campus Connect Foundation Program and soft skills” for students of all streams during every semester vacations.

## **Seminars/Workshops Attended**

- Participated in one-day Faculty Development Program on “Computer Vision in Industry, Cloud and Micro-Services an API” conducted by TCS Ltd, Bangalore on 16th Feb 2019 at BIET, Davangere.
- Participated in one-day workshop on “ Machine Learning to Deep Learning” conducted by BCIC and IBM R&D AI on 23rd Feb 2019 held at BIET, Davangere.
- Attended bootcamp on “Building Chatbots Using IBM Watson Assistance” on 11th Oct 2018 conducted by Smartbridge in association with IBM held at BIET, Davangere.

- Participated in the Faculty Development Program on “IoT, Data Analytics & Software Defined Network” organized by Tata Consultancy Services Ltd. Bengaluru on 16th March 2018, held at BIET, Davangere.
- Attended webinar session on “Oracle Virtual Day” conducted by ICT-Academy on 26th Feb 2018.
- Attended workshop on “Salesforce Fundamentals” conducted and sponsored by Salesforce from 17th Nov to 19th Nov 2017.
- Attended workshop on “Intellectual Property Rights” organized by Research & Development Cell of BIET, Davangere held on 6th April 2017.
- Attended three day workshop on “Internet of Things” with RaspberryPi-3 and Python in association with Tenet Techtronic’s Technologies, Bangalore from 9th Nov to 11th Nov 2016.
- Attended Conference on “IBM DeveloperConnect-2016”, held on 17th June 2016 at KTPO Conference Center, Whitefield, Bangalore.
- Attended one day workshop on “Research Add-ons” conducted by Department of CS&E , held at BIET Davangere.
- Attended workshop on “Research Methodology and Latex” from 18th to 20th March 2015, held at VTU Regional Office Bengaluru.
- Attended Certification program on “IBM BlueMix Enablement Session” held at Dept. of CS&E, BIET, Davangere on 27th Aug 2014.
- Attended one day workshop on “Women Empowerment” conducted by Department of IS&E on 18th to 19th Dec 2014.
- Attended and successfully completed the requirements for “EMC Academic Associate, Information Storage and Management” conducted by EMC2 on 2nd Dec 2014.
- Attended Certification Program on “IBM Certified Specialist–Rational Team Concert V3” held on 9th Nov 2013, at BIET- Davangere.
- Attended Certification Program on “IBM Certified Deployment Professional – Tivoli Directory Server V6.3” held on 26th Dec 2012, at BIET- Davangere.
- Attended Certification Program on “IBM Certified Associate System Administrator – Lotus Notes & Domino 8” held on 18th May 2012, at BIET- Davangere.
- Attended Certification Program on “IBM Certified Academic Associate –DB2 Database & Application Fundamentals” held on 29th Aug 2011, at BIET- Davangere.
- Attended Certification Program on “IBM Certified Solution Designer – Rational Functional Tester for Java ” held on 23th Sep 2010, at BIET- Davangere.
- Attended Certification Program on “IBM Certified Deployment Professional – Tivoli Directory Server V-6.1 ” held on 3th April 2010, at BIET- Davangere.
- Attended Certification Program on “IBM Certified Associate Developer - Rational Application Developer for WebSphere Software V6.0” held on Oct 14, 2009, at BIET- Davangere.
- Co-Convener for Three Day Workshop on “Web Programming” for CS/IS faculty members of VTU colleges held at BIET, Davangere from 25th to 27th June 2009.
- Attended Certification Program on “IBM Certified Database Associate - DB2 9 Fundamentals” held on 14th May 2009, at BIET - Davangere.
- Attended a Progressive “Experiential Learning Session – Mission10X Conclave 2011”, held at Dayananda Sagar college of Engineering, Bangalore on 19th Aug 2011.
- Attended Mission10X “Supporting Advanced workshop” held on 19th & 20th April 2010.
- Participated in “Mission10X workshop” from 2nd Feb to 6th Feb 2010 conducted at BIET, Davangere.

- Attended three day workshop on “Digital System Design using HDL-Synthesis & Simulation using Test Benches” from 16th to 18th April 2009.
- Participated in the National Conference on “ Recent Trends in Cryptography” from 1st & 2nd April 2009, conducted by Department of IS&E, BIET Davangere.

## **Expert Lectures Delivered**

- Delivered a session on “Networking Concepts” during 2 days Training Program for All India Police Staff on “Computer Skills and Internet Awareness Program” from 15th to 16th of June 2016 held at BIET, Davangere.
- Actively involved in delivering the session on “ Object Oriented Programming with C++” during the crash course on C++ as part of VTU syllabus and notification.
- Conducted sessions for Government Schools kids on “Computer Concepts and Internet Awareness” From 21st April 2016 to 4th May 2016 under TBRP (Technical Barrier Reduction Program), held at BIET, Davangere.
- Delivered a talk on “Choosing the Right Projects” for Final and Pre-Final year BCA students held at Bapuji B-Schools on 11th Aug 2015.
- Delivered a session on creating “Power Point Presentation” during 10 days Training Program for teaching faculty of AVK Degree College during 20th to 29th June 2012 on “Computer Skills and Internet Concepts” held at BIET, Davangere.
- Regularly involved in handling sessions for Infosys Campus Connect Foundation Program and soft skills.

## **Grants**

- Received grants of Rs.3.0 lakhs for the student project proposal titled “ Smart Ward Tracking and alerting system” under NAIN [ New Age Incubation Network], Govt. Of Karnataka Initiative.

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