

Name : Dr. V. Shobana
Designation : Professor & Head
Department : Computer Science with Cybersecurity
Qualification : M.C.A., M. Phil., TN–SET, Ph. D.
Experience :



Teaching : 14 Years 4 months Industry: 1.6 Year Research: 08 years

Area of Specialization(s) : Database, Data Mining and Big Data Analytics, Python

Email (Official ID) : shobana@drngpasc.ac.in

Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Computer Science	Chikkanna Government Arts College, Tirupur.	2023
M.Phil.	Computer Science	PRIST University, Thanjavur.	2010
M.C.A	Computer Applications	Maharaja Engineering College, Avinashi.	2007
B.Sc.	Physics	P.S.G.R. Krishnammal College for Women, Coimbatore	2004

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
Certification	Cyber Security and Privacy	NPTEL, IIT Madras.	2023
Certification	Digital Teaching Techniques	ICTACT	2020
Certification	Introduction To R	Spoken Tutorial, IIT Bombay	2020
Certification	Python for Data Science	NPTEL, IIT Madras.	2019
Certification	The Joy of Computing Using Python	NPTEL, IIT Madras.	2018
Certification	Research Writing	NPTEL, IIT Kharagpur.	2018

SET	Computer Science	TN-SET	2016
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Research Publications (Indexed)

International

- V. Shobana **Emerging Cybersecurity Threats and Trends in Electrical and Electronics Systems: An Empirical Analysis**, International Journal of Scientific Research in Engineering and Management (IJSREM), Volume: 08 Issue: 05, May 2024, ISSN: 2582-3930(Indexed in UGC)
- V. Shobana, **Role of Cyber Security in Mitigating Challenges, Threats and to Enhance Prevention Methods in the Modern Digital Era**, Journal of Propulsion Technology, Volume 44, Issue 06, December 2023. ISSN:1001-4055.
- V. Shobana and K. Nandhini, **Ensemble Techniques to improve the performance of the High Dimensional MultiClass Algorithms** 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT), 2022, pp. 1-5, doi: 10.1109/ICEEICT53079.2022.9768646. (IEEE Digital Explore)
- V. Shobana, Dr. K. Nandhini, **High Dimension Multi Class Algorithms (HDMCA) for Classification and Prediction: An Analysis of Different Algorithms, Performance Measures and Datasets** International Journal of Scientific & Technology Research (IJSTR) Volume 9, Issue 02, pp. 5778-5781, February 2020. ISSN 2277-8616 (Indexed in SCOPUS)
- V. Shobana, Dr. K. Nandhini, **Multiclass Data Imbalance Oversampling Techniques (MuDIOT) and Random Selection of Features**, IJITEE, Volume-8 Issue-12, October 2019, ISSN: 2278-3075. (Indexed in SCOPUS)
- V. Shobana, Dr. K. Nandhini, **Identifying Oversampling and under sampling of Data-A Practical Approach Using R**, IJCSE, Vol.-7, Issue-5, May 2019 E-ISSN: 2347-2693, (Indexed in Google Scholar)
- V. Shobana, N. Kumar, **A Personalized Recommendation Engine for Prediction of Disorders using Big Data Analytics**, IEEE Digital Library, November 2017, (Indexed in SCOPUS).
- V. Shobana, Dr. K. Nandhini, **Application of Classification Algorithms for Disease Diagnosis using Big Data Analytics**, International Journal of Engineering Research in Computer Science and

Engineering, Volume 4, Issue 12, pp.235 to 239, December 2017, ISSN (Online) 2394-2320, (Indexed in UGC).

- V. Shobana, Dr. K. Nandhini, **A Literature Survey on Recommender System Algorithms and its Applications in Health Care using Big Data Analytics**, International Journal of Innovations, Advancement in Computer Science, Volume 6, Issue 8 pp. 111 to 115, August 2017, ISSN 2347 – 8616, (Indexed in UGC).
- S. R. Kalaiselvi, S. Maheshwari, **V. Shobana, Web Mining – Data Mining Concepts, Applications, and Research Directions**, International Journal of Advanced Research in Computer and Communication Engineering, Volume 4, Issue 11, pp. 394-398, November 2015, ISSN (Online) 2278-1021, (Indexed in Google Scholar).
- V. Shobana, S. Maheshwari, M. Savithri, **Social Networking - Merits and Demerits: A Review**, International Journal of Engineering and Management Research, Volume-5, Issue-5, pp. 65-68, ISSN (ONLINE): 2250-0758, October-2015, (Indexed in Google Scholar).
- V. Shobana, N. Kumar, **Big Data - A Review**, International Journal of Applied Engineering Research, Volume 10, Issue 55, pp. 1294-1298, ISSN 0973-4562, June 2015, (Indexed in SCOPUS).
- V. Shobana, S. Maheshwari, M. Savithri, **Study on Big Data with Data Mining**, International Journal of Advanced Research in Computer and Communication Engineering, Volume 4, Issue 4, pp. 381 to 383, ISSN (Online) 2278-1021, April 2015, (Indexed in Google Scholar).
- M. Savithri, V. Shobana, K. Thenmozhi **A Review on Types of Attacks In Mobile Ad-Hoc Networks**, International Journal of Research Issues in Computing Sciences (IJRICS), Volume.1 No.1, August 2013.

National

- V.Shobana, Health wise – **An Android Application for Private Health and Nutrition Management**, International Research Journal of Engineering and Technology, Volume 8, Issue 3, March 2021, ISSN: 2395-0072.
- V.Shobana, V. Parkavi, **Implementation of Market Basket Analysis Using Apriori Algorithm** International Journal of Scientific Research in Engineering and Management (IJSREM) Volume 04 Issue 03 March 2020. ISSN: 2582-3930 (Indexed in Google Scholar).

- V.Shobana, Latha. S, **Weather Prediction Analysis Using Data Mining** International Journal of Scientific Research in Engineering and Management (IJSREM) Volume 04 Issue 03 March 2020. ISSN: 2582-3930 (Indexed in Google Scholar).
- V. Shobana, **Challenges and Future Changes in Big Data** CiiT International Journal of Programmable Device Circuits and Systems, Vol 11, No 12, December 2019. ISSN 0974-973X.

Books/Book Chapter Publications

- Published a book titled **Ethical Hacking** with ISBN 978-93-6010-384-2, Prime International Publisher.
- Published in the edited book title **Advancement of Machine Learning and its Applications for Prediction and Classification**, *Application of Predictive Analytics in Healthcare using Machine Learning Algorithms- An Experimental Approach* with ISBN 978-93-5607-149-0, Immortal Publications, Vijayawada.

Presentations in Conference

- **Integrating Explainable Machine Learning (XAI) in Stroke Medicine: Opportunities and Challenges for Early Diagnosis and Prevention**, 2nd International Conference on Machine Learning and Autonomous Systems (ICMLAS 2025), Stamford International University Bangkok, Thailand, 10-Mar-25 to 12-Mar-25
- **Digital Dharma: Integrating Traditional Indian Knowledge Systems with ICT in NEP-Driven Higher Education**, National Seminar on Integration of Traditional Indian Knowledge System into Modern Higher Education-NEP Perspective (ICSSRIKS2024), Dr. N.G.P. Arts and Science College, Coimbatore, 04-Jul-24 to 05-Jul-24.
- **Internet of Things in Healthcare**, International Conference on Multidisciplinary Research, and Innovation (ICMRI 2023), Adithya College of Arts and Science, Coimbatore, ISBN 978-93-92293-71-9 1, Apr-23.
- **Ensemble Techniques to improve the performance of the High Dimensional Multiclass Algorithms**, IEEE Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), K. Ramakrishnan College of Engineering, Tiruchirappalli, 16 to 18-Feb-22.

- **Review on Market Basket Analysis using Data Mining Techniques**, Second International Conference on Research Trends in Computing Technologies, Faculty of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, 28 & 29-Feb-20.
- **Challenges and Future Changes in Big data**, UGC Sponsored International Conference on Recent Trends in Advanced Computing, Department of Computer Science (ICRTAC 2019), Erode arts and Science College, Erode, 13 & 14 Dec-19.
- **Event Management System Using React Native, NodeJS and MongoDB**, National Conference on Emerging Trends in Mathematics with Computer Applications, Department of Computer Science, Mathematics and Computer Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 12 & 13-Sep-19
- **Challenges and Opportunities with Big Data** National Conference on Emerging Trends in Computing and Intelligent Informatics organized by Department of Computer Science and Engineering, Dr. N.G.P. Institute of Technology, Coimbatore, 8-Mar-19.
- **Big Data Analysis, Tools, Challenges and Applications**, International Conference on Research Trends in Computing Technologies, Faculty of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, 8 & 9-Aug-18.
- **Application of Classification Algorithms for Disease Diagnosis using Big Data Analytics**, International Conference on Recent Enhancements in Information Technology, Science and Engineering, Thoothukudi, 14 & 15-Dec-17.
- **A Literature Survey on Recommender System Algorithms and its Applications in Health Care using Bigdata Analytics**, International Conference on Research Trends in Engineering Applied Sciences and Management, Institution of Electronics and Telecommunication Engineers, Bengaluru, 6-Aug-17.
- **A Personalized Recommendation Engine for Prediction of Disorders using Big Data Analytics**, International Conference on Innovations in Green Energy and Health Care Technology, Dr. N.G.P. Institute of Technology, Coimbatore, 16 to 18 Mar -17.
- **A Study on Recommender Systems using Bigdata Analytics**, National Conference on Advanced Computing, Bharathiar University, Coimbatore, 22 & 23-Sep-18.
- **Big Data - A Review**, International Conference on Advances in Applied Engineering and Technology, Syed Ammal Engineering College, Ramanathapuram, 14 to 16-May-15.
- **Social Networking - Merits and Demerits: A Review**, National Conference on Innovative Trends in Information Technology, KG College of Arts and Science, Coimbatore, 7-Feb-15.

- **A Survey on Types of Attacks in Mobile Adhoc Network**, UGC Sponsored National Conference on Web Science and Technology in Association with ICTACT, PSG College of Arts and Science, Coimbatore, 10 & 11-Oct-12.

Participation in Conference

International

- **Research Trends in Computer Technologies**, Dr. N.G.P. Arts and Science College, Coimbatore, 30-Jan-14 to 31-Jan-14.
- **Emerging Education Models for 21st Century Learner**, Dr. N.G.P. Arts and Science College, 01-Aug-15.

Participation in Seminars

- **National Cyber Security Summit 24, Emerging Technologies and Trends in Cloud Security**, Sri Manakula Vinayagar Engineering College, Puducherry, 01-Mar-24 to 02-Mar-24.
- **Women's Strategy Summit 2023, The Rise of Women Titans** Christ (Deemed to be University), Pune, 30-Nov-23 to 01-Dec-23.
- **Youth Leadership Summit 2023**, ICT Academy, Codissia Trade Fair Complex, Coimbatore 12-Oct-23.
- **Sustainable Environment for Development of Crop returns in the field of Agriculture using IoT**, organized by the Department of Computer Science and Engineering sponsored by Council of Scientific and Industrial Research (CSIR) Organization, New Delhi at Dr. N.G.P. Institute of Technology, Coimbatore. 17-Mar-2022.
- **Applications and Challenges in Data Mining**, Bharathidasan College of Arts and Science, Erode, 24-Aug-17.
- **Research Methodology**, Asan College of Arts and Science, Karur, 5-Oct-16.
- **Cyber Security Awareness and Defense Techniques**, Dr. N.G.P. Arts and Science College, Coimbatore, 25-Aug-14.
- **Big Data Storage and Analytics**, Dr. N.G.P. Institute of Technology, Coimbatore 27-Dec-13.
- **Embedded Computing Systems**, Dr. N.G.P. Institute of Technology, Coimbatore, 30-Jan-13.
- **Software Testing** R.V.S. College of Computer Applications, 13-Feb-10

Participation in Workshop

- **Outcome Based Education (OBE)**, Dr. N.G.P. Arts and Science College, IPSR solutions Limited, Coimbatore, 04-03-23.

- **Professional Ethics & Plagiarism and Strengthening Research for Quality Publications**, Sankara College of Science and Commerce, Coimbatore, 31-Aug-19.
- **How to tap Funding Agencies? Publishing ethics and Plagiarism Tool & Reference Management Tools for Research**, Sankara College of Science and Commerce, Coimbatore, 02-Mar-19.
- **Data Mining, Its Application using Rapid Miner**, Dr. N.G.P. Arts and Science College, Coimbatore, 28-Dec-13.
- **Art of Research**, PSG College of Technology, Coimbatore, 24-Aug-13.
- **Enhance Teaching Skills Workshop Mission 10X**, Wipro, Dr. N.G.P. Arts and Science College, Coimbatore, 6-Sep-13 to 8-Sep-13.

Participation in Orientation Programme / Short Term Courses

- **How to Do Research in Computer Science**, Hindustan College of Arts and Science, Coimbatore, 21-Jan-15.
- **Research Challenges and Security Issues in Wireless Networks**, Dr. N.G.P Institute of Technology, 07-Dec-15 to 11-Dec-15.

Participation in Faculty Development Programme

- **Strengthening Cybersecurity Awareness, Defense & Research**, Five days Faculty Development Programme (Virtual), Department of Computer Applications, PSG College of Arts and Science from 24-Feb-2025 to 28-Feb-25.
- **Cyber Security and Privacy**, NPTEL-AICTE, Funded by Ministry of Education, Government of India, Jul-Oct 2023(12 weeks).
- **Cyber Security Challenges in the era of Open Networks and IoT**, One-week National Level Faculty Development Programme, A.C.T. Academy in association with Academic and Research Conglomerate from 02-Oct-23 to 09-Oct-23.
- **Recent Research Trends and Challenges in Computer Science**, 5-day Faculty Development Programme (Virtual), Department of Software Systems and Computer Science (PG) KG College of Arts and Science, Coimbatore from 11-Sep-23 to 14-Sep-23.
- **Recent Trends on Research Methodologies, Tools and Techniques**, 6-Day International Virtual Faculty Development Programme, Department of Information Technology, KG College of Arts and Science, Coimbatore from 10-Jul-23 to 15-Jul-23.

- **Empowering Education for Innovation – A NEP Perspective**, Five-day Faculty Development Programme, Centre for Professional Development, Dr N.G.P. Arts and Science College, Coimbatore from 30-June-23 to 4- Jul-23.
- **Outcome Based Education, Five-day Faculty Development Programme**, Centre for Professional Development, Dr N.G.P. Arts and Science College, Coimbatore from 17-June-23 to 21- June-23
- **Recent Advancements in Intelligent Computing Technologies**, Department of Computer Science and Engineering, Sri Krishna College of Engineering and Technology, 19-Dec-22 to 23-Dec-22.
- **Impact of Artificial Intelligence**, Department of Computer Science in association with the NovieTech R & D Pvt. Ltd, Coimbatore, Dr. SNS Rajalakshmi College of Arts and Science, 07-Nov-22 to 11-Nov-22.
- **Data Analytics**, Department of Computer Applications, Presidency College, Bengaluru, 25-Apr-22 to 29-Apr-22
- **Learn, Unlearn and Relearn**, Department of Computer Studies, Hindusthan College of Arts and Science, Coimbatore. 25-Sep-20 to 05-Oct-20.
- **Introduction to Angular JS**, ICTACT, Karpagam College of Engineering, Coimbatore 19-20-Dec-19.
- **Python for Data Science**, NPTEL-AICTE, Funded by Ministry of HRD, Govt. of India, Aug-Sep-19(4 weeks).
- **NAAC Revised Accreditation Framework and OBE Assessment Methodology** FDP Cell and IQAC, Dr. N.G.P. Arts and Science College, 27-May-19 to 02-May-19.
- **Data Science and Big Data Analytics**, ICTACT, Dr. N.G.P. Institute of Technology, Coimbatore, 10 to 14-Dec-18.
- **Quality Measures in Higher Education**, Dr. N.G.P. Arts and Science College, Coimbatore, 3-Dec-2018 to 9-Dec-18.
- **Introduction to R Programming**, ICTACT, Dr. N.G.P. Arts and Science College, Coimbatore, 30 & 31-Aug-18.
- **Big Data and Analytics - Transitions and Tools**, Department of Computer Science, Dr. G.R.D. College of Science, Coimbatore, 19-Jan-18.
- **Bioinformatics in Life Science Research**, P.S.G.R. Krishnammal College for Women, Coimbatore, 9 & 10-Feb-17.
- **Women and Biodiversity** Department of Bharathiar University, Department of Women's Studies, Bharathiar University, 21-Sep-16.

- **HDP – HADOOP (HORTONWORKS)**, ICTACT, Sri Ramakrishna Engineering College, Coimbatore, 27 to 31-Oct-15.
- **Faculty Development Programme**, Kongunadu Arts and Science College, Coimbatore, 27-Sep-14.

Participation in Professional Development Programme

- **Implementation of NEP-2020 for University and College Teachers**, UGC-Approved Short-term Professional Development Programme, 18-Nov-22 to 26-Nov-22 and secured A Grade.
- **Achieving Excellence Through Self Awareness: Upbeat your Life Skills**, Research Culture Society & Scientific Research Association, 26-Jun-22 to 30-Jun-22.

Conference / Seminar / Workshop Organized

- **Reviewer**, International Conference on Innovation, Sustainability and Applied Sciences (ICISAS 2025), Curtin University Dubai, 22-Feb-2025 to 23-Feb-2025.
- **Session Chair**, National Seminar on Integration of Traditional Indian Knowledge System into Modern Higher Education-NEP Perspective (ICSSRIKS2024), Dr. N.G.P. Arts and Science College, Coimbatore, 04-Jul-24 to 05-Jul-24.
- **Organizer**, International Conference on Computational Intelligence and Communication Technologies (ICCICT 24), organized by Faculty of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, 04-Jan-24.
- **Technical Reviewer**, International Conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECI 2023), Department of Electrical and Electronics Engineering, K.S.R. College of Engineering, Tiruchengode, Tamil Nadu, India, 19-Oct-23 to 20-Oct-23.
- **Reviewer**, International Conference on Computational Sciences and Sustainable Technologies (ICCSST), Department of Computer Science, Christ (Deemed to be University) Bangalore and Modern College of Business and Science, Muscat, Oman, 08-May-23 to 09-May-23.
- **Chairperson**, DST-SERB Sponsored, National Seminar on Computing Platforms for Biological Big Data Analytics, Dept. of Information Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 05-Feb-20.

- **Organizer**, Second International Conference on Research Trends in Computing Technologies, Faculty of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, 28 & 29-Feb-20.
- **Organizer**, State Level Technical Symposium – Techopedia 2020, Dr. N.G.P. Arts and Science College, Coimbatore, 13-Feb-20.
- **Editorial Team Member**, National Conference on Emerging Trends in Mathematics with Computer Applications, Department of Computer Science, Mathematics and Computer Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 12 & 13-Sep-19.
- **Editorial Team Member**, International Conference on Research Trends in Computing Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 9 to 10-Aug-18.
- **Organizer**, State Level Technical Symposium - Technomania, Dr. N.G.P. Arts and Science College, Coimbatore, 15-Feb-18.
- **Organizer**, National Conference on Innovations in Communicative World, Dr. N.G.P. Arts and Science College, Coimbatore, 27-Sep-12.

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
IAENG	Lifetime-141750	-
Institute of Researchers	Lifetime-LMO52206	-

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Mentor Award	Sri GVG Visalakshi College for Women	2025
Mentor Award	Ministry of Education	2024
Mentor Award	Sri GVG Visalakshi College for Women	2023
Young Researcher Award	Institute of Researchers	2022
Best Paper Award	K. Ramakrishnan College of Engineering, Tiruchirappalli	2022
Top Performing Mentor Award	NPTEL	2018