

Name : Dr. P. Usha
Designation : Assistant Professor
Department : Computer Science
Qualification : M.Sc., M.Phil., Ph.D.
Experience : Teaching - 16 Years
Area of Specialization(s) : Big data analytics & Data Mining
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Academic Qualifications

Degree	Branch	Institution / University Name	Year
Ph.D.	Computer	Nehru arts and science college, Coimbatore	2023
M.Phil.	Computer	Dr. N.G.P. Arts and Science College, Coimbatore	2011
M.Sc.	Computer	Dr. N.G.P. Arts and Science College, Coimbatore	2007

Additional Qualifications

Dip. /	Area of Specialization	Institution / University / Agency	Year
Certificate	Implementation of NEP-2020	NPTEL, IGNOU	2022
Certificate	Basics of Python	INFOSYS Springboard	2022
Certificate	Introduction to Psychology	NPTEL, Ministry of HRD	2022
Certificate	Digital Teaching Techniques	ICT Academy	2020
Certificate	Research Writing	NPTEL, Ministry of HRD	2018
Certificate	Stress Management	NPTEL, Ministry of HRD	2018

Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
M. Phil.	1	-

Research Publications (Indexed)

1. P. Usha, An **Optimized Cluster Convolution Based Hybrid Hierarchical Deep Learner for Chronic Kidney Disease (CKD)**. International Journal of Engineering Trends and Technology, Volume 70 Issue 11, 154-162, <https://doi.org/10.14445/22315381/IJETT-V70I11P216>.(Scopus Indexed).

2. P. Usha, Optimized **Uncertainty Handling Feature Selection Using Moth Flame Based DBSCAN Clustering for Diabetic Related Chronic Kidney Disease**, Journal of Theoretical and Applied Information Technology, May 2022, Volume100, No 10, ISSN: 1992-8645, E-ISSN: 1817-3195. (Scopus Indexed).
3. P. Usha, Expense **Tracker Application**, International Journal of Innovative Research in Technology, Volume 7, Issue 10, March 2021, ISSN: 2349-6002 (Indexed by UGC).
4. P. Usha, Women **Safety Application**, International Journal of Innovative Research in Technology, Volume 7, Issue 10, March 2021, ISSN: 2349-6002 (Indexed by UGC).
5. P. Usha, Home **Appliance Rental Application**, International Research Journal of Engineering and Technology, Volume 7, Issue 2, Feb-2020, ISSN: 2395-0072, (Indexed by UGC).
6. P. Usha, Smart **Garbage Monitoring System Using IOT**, International Journal of Scientific Research in Engineering and Management (IJSREM), Volume: 04 Issue: 03 | Mar -2020 ISSN: 2582-3930, (Indexed by UGC).
7. P. Usha, Review **on Search Engine Optimization**, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 02 | Feb 2020(Indexed by UGC).
8. P. Usha, Machine **Learning Approach for Diabetes Disease Prediction: A Review**, International Journal of Research and Analytical Reviews (IJRAR), June 2019, (E-ISSN 2348-1269, P- ISSN 2349-5138) IJRAR19L1245 (Indexed by UGC).
9. N. Tamil Selvi, S. Saranya, P. Usha, M. Yasodha, **Perception of Tired Blood and its Causes using Mining Techniques**, International Journal of Engineering Sciences & Research Technology, January-2015, ISSN: 2277-9655, (Indexed by Google Scholar).
10. M. Yasodha, P. Usha, S. Saranya, N. Tamilselvi, **Mining Temporal Sequences using Transform Techniques**, International Journal of Advanced Research in Computer Science and Software Engineering, Volume 3, Issue 12, pp. 691-697, December-2013 ISSN: 2277 128X, (Indexed by Crossref)
11. S. Saranya, N. Tamilselvi, P. Usha, M. Yasodha, V. Padmapriya, **Data Mining Techniques in EDM for Predicting the Pupil's Outcome**, International Journal of Advanced Research in Computer and Communication Engineering, Vol. 2, Issue 6, June 2013, ISSN (Print): 2319-5940ISSN (Online): 2278-1021, (Indexed by Google scholar)

12. P. Usha, S. Saranya, N. Tamilselvi, Prevalance **and Risk Factors of Anemia along with Classifiers**, International Journal of Scientific & Engineering Research, Volume 4, Issue 5, pp 2217-223, May-2013, ISSN 2229-5518, (Indexed by Crossref)

Other Publications: International / National Journals

1. P. Usha, Dr. N. Kavitha, **A Literature Survey on Big Data**, CiiT International Journal of Wireless Communication, Vol 10, No 1, January -2018, Digital Object Identifier: WC012018004.
2. P. Usha, N. Priya, **An Adaptive Energy Efficient Routing and Misbehavior Detection for Wireless Body Area Network**, International Journal of Advanced Research in Computer Science and Software Engineering, Volume 5, Issue 11, pp.386-391, November- 2015, ISSN: 2277 128X.
3. P. Usha, N. Priya, **Survey on Security Issues in WBAN**, International Journal of Advanced Research in Computer Science and Software Engineering, Volume 5, Issue 1, pp. 482-485, January- 2015 ISSN: 2277 128X.
4. P. Usha, K. Nandhini, **Predicting Academic Performance using Genetic Algorithm and SVM Classifier**, CiiT International Journal of Data Mining Knowledge Engineering, Issue: October-2010, DOI: DMKE102010005.

Book Chapter Publication

1. **Machine Learning Approach for Type II Diabetes Prediction**, International Conference on Digital Information Security and Computing Technologies, Sankara College of Science and Commerce, Vol:1, ISBN: 978-93-5620-321-1 on 08-Apr-22 to 09-Apr-22

Presentations in Conference

1. **Stress Prediction Using Machine Learning Techniques**, National Conference on Advanced Computing Sciences, Dr. N.G.P. Arts and Science College, Coimbatore, 16-Mar-23.
2. **Machine Learning Approach for Type II Diabetes Prediction**, International Conference on Digital Information Security and Computing Technologies, Sankara College of Science and Commerce,08-Apr-22 to 09-Apr-22

3. **Prediction of Chronic Kidney Disease for Diabetes Patients Using Ensemble Based Machine Learning Algorithms**, International Virtual Conference on Innovations in Science and Technology, Nehru Arts and Science College, Coimbatore, 31-May-2021.
4. **Smart Garbage Monitoring Using IOT**, National Conference on Machine Learning and Smart Technology, Sri Krishna arts and Science College, 12-Feb-20.
5. **Evaluating The Role of Levels of Major Depressive Disorder**, Two-day international conference On Interdisciplinary Research Innovations in Science and Humanities (IC-IRISH'19),11-Nov-19 to 12-Nov-19.
6. **A Novel Approach for Classifier User History in Obscured Web**, Two Days National Conference on Emerging Trends in Mathematics with Computer Applications (ETMCA-19), Dr. N.G.P. Arts and Science College, Coimbatore, 12 & 13-Sep-19.
7. **A Literature Survey on Big Data**, Nehru Arts and Science College, Coimbatore, 9-Feb-18.
8. **Human Health Monitor Technology and Security for Wireless Sensors Network (WSN)**, National Conference on Recent Trends in Computer Technology, Kodaikanal Christian College, 16-Sep-15.
9. **Survey on Security Issues in WBAN**, International Conference on Competency Building Strategies in Business and Technology for Sustainable Development, Sri Ganesh School of Business Management, Coimbatore, 20-Feb-15.
10. **Compensatory Mechanisms of Anemia using Classifier Techniques**, International Conference on Big Data Analysis and Distributed Systems, Periyar University College of Arts and Science, Pennagaram,12-Sep-14.
11. **EDM Techniques for Pupil's Data Archaeology**, Advances in Computing, Analysis and Applications, SNS College of Technology, Coimbatore, 13-Mar-14.
12. **Classifiers in Academic Sector**, UGC Sponsored National Conference on Web Science and Technology, PSG College of Arts and Science, Coimbatore, 10-Oct-12.
13. **Genetic Algorithm and SVM Classifier**, National Seminar on Crystallizing Trends in IT, Sankara College, Coimbatore, 15-Feb-12.
14. **Predicting Student Performance based on Classification Technique**, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore, 17-Sep-10.

Participation in Conference

1. **Research Trends in Computer Technologies**, Dr. N.G.P. Arts and Science College, Coimbatore, 30 & 31-Jan-14.
2. **Issues in Higher Education**, Dr. N.G.P. Arts and Science College, Coimbatore, 29-Oct-10.
3. **Achieving Academic Excellence through Internal Quality Assurance Cell**, Dr. N.G.P. Arts and Science College, Coimbatore, 9 & 10-Dec-11.

Participation in Seminars

1. National Level Seminar on **Sustainable Environment for Development of Crop returns in the Field of Agriculture Using IOT**, Dr. N.G.P. Institute of Technology, 17-Mar-22.
2. International Webinar on **Tableau for Data Visualization**, Nandha Engineering College, Erode, 17-Jun-2020
3. **Applications and Challenges in Data Mining**, Bharathidasan College of Arts and Science, 24-Aug-17.
4. **Research in Computers: Why, What and How**, Bharathiar University, 10-Feb-12.

Participation in Workshop

1. **One Day Workshop on Outcome Based Education (OBE)**, IPSR Solutions Limited, Dr. N.G.P. Arts and Science College, 04-Mar-23.
2. **Online Training on IEEE Xplore**, EBSCO Information Services, 25-Aug-2022.
3. **Data analysis using Python**, Nehru Arts and Science College, 09-Aug-21.
4. **Professional Ethics and Plagiarism and Strengthening Research for Quality Publications**, Sankara College of Science and Commerce, 31-Aug-19.
5. **How to Tap Funding Agencies? Publishing Ethics and Plagiarism Tool & Reference Management Tools for Research**, Sankara College of Science and Commerce, 2-Mar-19.
6. **Statistical Analysis using R**, Bharathiar University, Coimbatore, 6 & 7-Sep-18.
7. **Data Mining using Python**, Nehru Arts and Science College, Coimbatore, 1-Sep-18.
8. **Big Data Analytics using Hadoop**, PSGR Krishnammal College for Women, Coimbatore, 9 & 10- Feb-18.

9. **Science Academies Lecture Workshop on Healthcare Analytics**, Dr. N.G.P. Institute of Technology, Coimbatore, 26 &27-Sep-17.
10. **Medical Image Processing using MATLAB and FIJI: A Research Perspective**, Dr. N.G.P. Institute of Technology, Coimbatore, 23-Sep-16.
11. **Medical Image Processing using MATLAB and FIJI: A Research Perspective**, Dr. N.G.P. Institute of Technology, Coimbatore, 23-Sep-16.
12. **Processing using MATLAB and FIJI: A Research Perspective**, Dr. N.G.P. Institute of Technology, Coimbatore, 23-Sep-16.

Participation in Faculty Development Programme

1. International level faculty development programme on Research Toolbox Reloaded: Amplify your Scholarly Endeavours, Hindusthan College of Arts and Science on 21 to 25-Aug-23.
2. Faculty Development Program on **Introduction to Psychology**, IIT Madras (MHRD), Jan-Mar 22.
3. Two Day National Online Faculty Development Programme on **Plagiarism in Academic Research & Author Identifiers**, Indian Institute of Management and Commerce, 11-Apr-22 to 12-Apr-22.
4. One Week Faculty Development Programme on “**Current Trends in Information Technology**”, Nehru Arts and Science College, Coimbatore, 02-Feb-22 to 09-Feb-22.
5. Six-day Virtual National Executive Development Programme on “**New Trends in Higher Education and Emergence of Smart Teachers**”, Nehru Arts and Science College, Coimbatore, 25-Jun-2021 to 30-Jun-2021.
6. **FDP on research methodology and Pedagogy for tertiary education**, N.G.P. Arts and Science College, Coimbatore, 15-Jun-21 to 21-Jun-21.
7. **FDP on Being a Super Teacher** at Bannari Amman Institute of Technology from 06-Jul – 20 to 12-Jul-20
8. **Quality initiatives in higher education**, Dr. N.G.P. Arts and Science College, Coimbatore, 13-Apr-20 to 20-Apr-20.
9. **Seven-day faculty development programme** on NAAC revised accreditation framework and OBE Assessment Methodology, Dr. N.G.P. Arts and Science College, Coimbatore, 27-May To 02-June-19.

10. **Quality Measures in Higher Education**, Dr. N.G.P. Arts and Science College, Coimbatore, 3-Dec-18 to 9-Dec-18.
11. **Introduction to Python Programming**, Sri Ramakrishna College of Arts and Science for Women, Coimbatore, 18-Dec-18.
12. **Stress Management**, NPTEL-AICTE, Aug-Sep 2018.
13. **Big Data & Analytics-Transitions and Tools**, Dr. G.R. Damodaran College of Science, Coimbatore, 19-Jan-18.
14. **Bioinformatics in Life Science and Research**, PSGR Krishnammal College for Women, Coimbatore, 9 & 10-Feb-17.
15. **Big Data Analytics**, PSG College of Arts and Science, Coimbatore, 9 to 10-Sep-16.
16. **Enterprise Resource Planning using SAP B1**, Dr. N.G.P. Business School, Coimbatore, 31-Jul-10.

Conference / Seminar / Workshop Organized

1. Organizer, International Conference on Research Trends in Computing Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 28 & 29-Feb-2020.
2. Organizer, National level technical symposium TECHOPEDIA 2020, Dr. N.G.P. Arts and Science College, Coimbatore, 13-FEB-2020.
3. Organizer, Two Days National Conference on Emerging Trends in Mathematics with Computer Applications (ETMCA-19), Dr. N.G.P. Arts and Science College, Coimbatore, 12&13-SEP-19.
4. Editorial Team Member, International Conference on Research Trends in Computing Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 9 & 10-Aug-18.
5. Organizer, State Level Technical Symposium Technomania, Dr. N.G.P. Arts and Science College, Coimbatore, 15-Feb-18.

Editorial / Review Board Member

1. Editorial Board Member, International Journal of Scientific & Engineering Research, since 2014.

Membership in Professional Bodies

Name of the Professional Body	Nature of Membership	Duration
Internet Society	Life-time	-
Universal Association of Computer & Electronics	Life-time	-
International Association of Engineers	Life-time	-