Name : Dr. S. Saranya

**Designation**: Assistant Professor and Head

**Department** : Artificial Intelligence and Machine Learning

**Qualification**: M.Sc., M.C.A., M.Phil., Ph.D.

**Experience**:

Teaching: 11.7 years Industry: Nil Research: 9 Years

**Area of Specialization(s)** : Machine Learning and Deep Learning

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

## **Academic Qualifications**

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Computer Science	Nehru Arts and Science College, Coimbatore	2023
M.Phil.	Computer Science	Dr. N.G.P. Arts and Science College, Coimbatore	2013
M.C.A.	Computer Applications	Bharathiar University, Coimbatore	2012
M.Sc.	Computer Science	Dr. N.G.P. Arts and Science College, Coimbatore	2011
B.C.A.	Computer Applications	Kongu Arts and Science College, Erode	2009

## **Additional Qualifications**

Diploma/ Vocational/	Area of Specialization	Institution / University/	Year
Certification	Area of Specialization	Agency	Teal
Certification	Problem Solving Aspects and Python Programming	NPTEL, Ministry of HRD	2024
Certification	Deep Learning for Developers	INFOSYS Springboard	2024
Certification	Implementation of NEP-2020	NPTEL, IGNOU	2022
Certification	Basics of Python	INFOSYS Springboard	2022
Certification	Introduction to Psychology	NPTEL, Ministry of HRD	2022
Certification	Digital Teaching Techniques	ICT ACADEMY	2020
Certification	Introduction to Research	NPTEL, Ministry of HRD	2019
Certification	Research Writing	NPTEL, Ministry of HRD	2018

## **Research Publications (Indexed)**

1) Dr.S.Saranya, **A Comprehensive Study on Exploring the Diverse Applications of Artificial Intelligence,** Journal of Propulsion Technology, December 2023, Volume 44, No 6. (Indexed by Scopus).



- 2) Dr.P.Usha, **Dr.S.Saranya**, **Prediction of Chronic Kidney Disease for Diabetes Patients using Ensemble based Machine Learning Algorithms**, Journal of Propulsion Technology, December 2023, Volume 44, No 6. (Indexed by Scopus).
- 3) S.Saranya, A Self-Stabilizing And Parameter-Optimized Deep Learning Model For Predicting Mental Health Disorder, International Journal of Intelligent Engineering and Systems (IJIES) October 2022, Volume 15, No 6, DOI: 10.22266/ijies2022.1231.49. (Indexed by Scopus).
- 4) S.Saranya, **Prognosis Of Clinical Depression With Resting State Functionality Connectivity Using Machine Learning**, Applications of Artificial Intelligence and Machine Learning, Springer, October 2022. (Indexed by Scopus).
- S.Saranya, Robust Feature Selection With Chicken Swarm Intelligence Improved Multilayer Perceptron For Early Detection Of Mental Illness Disorder", Journal of Theoretical And Applied Information Technology, May 2022, Volume 100, No 10, ISSN: 1992-8645, E-ISSN: 1817-3195. (Indexed by Scopus).
- 6) Pavitha, **S.Saranya**, **Survey on Android Based Parent Notification System**, International Journal of Innovative Research in Technology(IJIRT), March 2021, Volume 7, Issue 10, (ISSN: 2349-6002), (Indexed by UGC).
- 7) C.Siva Swetha, **S.Saranya, Review on Intruder Detection Security System,** International Journal of Scientific Research in Engineering and Management (IJSREM), April 2020, Volume 04, Issue 04, (ISSN: 2582-3930), (Indexed by UGC).
- 8) K.Loga Priya, S.Saranya, Review on Home Automation Using NodeMCU and IFTTT, International Journal of Scientific Research in Engineering and Management (IJSREM), April 2020, Volume 04, Issue 04, (ISSN: 2582-3930), (Indexed by UGC).
- 9) K.Loga Priya, **S.Saranya**, **Voice-Activated Home Automation using NodeMCU**, International Research Journal of Engineering and Technology (IRJET), February 2020, Volume 7, Issue 2 (e-ISSN:2395-0056, p-ISSN: 2395-0072), (Indexed by UGC).
- 10) C.Siva Swetha, S.Saranya, Intruder Detection Security System, International Research Journal of Engineering and Technology (IRJET), February 2020, Volume 7, Issue 2 (e-ISSN: 2395-0056, p-ISSN: 2395-0072), (Indexed by UGC).
- S.Saranya, A Survey on Machine Learning Approach For Detection of Major Depressive Disorder using Resting State Functionality Connectivity, International Journal of Research and

Analytical Reviews (IJRAR), June 2019, Issue 2, (E-ISSN 2348-1269, P- ISSN 2349-5138), (Indexed by UGC).

- 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).
- 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).
- S.Saranya, **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): 2319-5940 ISSN (Online): 2278-1021, (Indexed by Google scholar).
- P.Usha S.Saranya, N.Tamilselvi, Prevalence 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).
- S.Saranya, **ID3 classifier for pupils' Status Prediction**, International Journal of Computer Applications, Volume 57- No 3, November 2012, ISSN 0975-8887. (Indexed by Google scholar, Crossref).

#### Other Publications: International / National Journals

- 1) S.Saranya, **A Review of Big Data Challenges and Techniques**, CiiT, International Journal of Wireless Communication, Vol 10, No 1, January-2018, Digital Object Identifier: WC012018004.
- 2) S.Saranya, Comparison of Decision Tree and ANN Techniques for Data Classification, International Journal of Emerging Technology and Advanced Engineering, Volume 2, Issue 3, March 2012, ISSN 2250-2459.
- 3) S.Saranya, **Teaching Skills An Enhanced Way**, Proceeding of State Level Conference, December 2011, ISBN 978-1-4507-8489-4.

### **Book Chapter Publication**

1) **Mental Health Prediction Models Using Machine Learning,** International Conference on Digital Information Security and Computing Technologies, Sankara College of Science and Commerce, Coimbatore, Vol:1, ISBN: 978-93-5620-321-1, 08-Apr-22 to 09-Apr-22.

#### **Presentations in Conference**

- 1) Data-Driven Decisions, Green Outcomes: Utilizing Artificial Intelligence in Urban Planning to Create Eco-Friendly Smart Cities, International Conference on Sustainable Advanced Computing, Christ University, Bangalore, 22-Mar-24 to 23-Mar-24.
- 2) Unveiling the AI Epoch: Origins to the Next Frontier, International Multidisciplinary Conference on Information Science, Management Research & Social Sciences, AJK College of Arts and Science, Coimbatore, 13-Mar-24 to 14-Mar-24.
- 3) **Generative AI in Virtual Reality,** National Conference on Emerging Trends in Artificial Intelligence, Sengamala Thayaar Educational Trust Women's College, Tiruvarur, 19-Feb-24 to 20-Feb-24.
- 4) **Heart Disease Prediction using Machine Learning Methods: A Survey, National** Conference on Advanced Computing Sciences, Dr. N.G.P. Arts and Science College, Coimbatore, 16-Mar-23.
- 5) **Digital Forensics,** Second International Conference on Computing and Intelligence System, Sri Krishna Adithya College of Arts and Science, Coimbatore, 24-Jan-23 to 25-Jan-23.
- 6) **Predictive Modeling of Depression using Machine Learning Techniques,** International Conference on Interdisciplinary Research Innovations in Science and Technology, Nehru Arts and Science College, Coimbatore, 10-May-22.
- 7) **Mental Health Prediction Models Using Machine Learning,** International Conference on Digital Information Security and Computing Technologies, Sankara College of Science and Commerce, Coimbatore, 08-Apr-22 to 09-Apr-22.
- 8) Prognosis of Clinical Depression with Resting State Functionality Connectivity Using Machine Learning, International Conference on Advances and Applications of Artificial Intelligence and Machine Learning, Sharda University, Uttar Pradesh, 29-Oct-21 to 30-Oct-21.
- 9) Prediction of Major Depressive Disorder Using Resting State Functionality Connectivity: Machine Learning Approach, International Virtual Conference on Innovations in Science and Technology, Nehru Arts and Science College, Coimbatore, 31-May-21.

- 10) **Evaluating The Role of Levels of Major Depressive Disorder,** Two Day International Conference On Interdisciplinary Research Innovations In Science And Humanities (ICIRISH-19),11-Nov-19 to 12<sup>-</sup>Nov-19.
- 11) **Automated Fingerprint Identification Systems A Review,** Two Days National Conference on Emerging Trends in Mathematics with Computer Applications (ETMCA-19), Dr. N.G.P. Arts and Science College, Coimbatore, 12-Sep-19 to 13-Sep-19.
- 12) **A Review on Big Data Techniques**, International Conference on Research Trends in Computing Technologies (ICRTCT-18), Dr. N.G.P. Arts and Science College, Coimbatore, 09-Aug-18 to 10 Aug-18.
- 13) A Review of Big Data Challenges and Techniques, International Conference on Innovations in Computer Science and Information Technology (ICICSIT'18), Nehru Arts and Science College, Coimbatore, 8- Feb-18 to 9 Feb-18.
- 14) **Compensatory Mechanisms of Anemia using Classifier Techniques**, International Conference on Big data Analytics and Distributed Systems, Periyar University College of Arts and Science, Dharmapuri, 12-Sep-14.
- 15) **EDM Techniques for Pupil's Data Archaeology**, Second National Conference on Advances in Computing, Analysis and Applications, SNS College of Technology, Coimbatore, 13-Mar-14.
- 16) **Review of Data Mining Techniques in Education Domain for Performance**, National Conference on Innovation in Communicative world, Dr NGP Arts and Science College, Coimbatore, 27-Sep-12.
- 17) **Data Mining Prediction using Classifiers**, National Level Seminar on Crystallizing Trends in IT, Sankara College of Science and Commerce, Coimbatore, 15-Feb-12.
- 18) **Teaching Skills An Enhanced Way**, NAAC Sponsored Two Day State Level Conference on Achieving Academic Excellence Through Internal Quality Assurance Cell (IQAC), Dr. N.G.P. Arts and Science College, Coimbatore, 09-Dec-11to 10 Dec-11.
- 19) **Techniques of Data Mining**, National Level Seminar on Networks, KG College of Arts and Science, Coimbatore, 24-Sep-11.

## **Participation in Conference**

#### International

- 1) **Research Trends in Computing Technologies**, Dr. N.G.P. Arts and Science College, Coimbatore, 09-Aug-18 to 10-Aug-18.
- 2) **Computer Communication and Information Technology**, Dr. N.G.P. Arts and Science College, Coimbatore, 28-Sep-16.

3) **Research Trends in Computer Technologies**, Dr. N.G.P. Arts and Science College, Coimbatore, 30 to 31-Jan-14.

#### National

- 1) **Emerging Education Models for 21**<sup>st</sup> **Century Learner**, Dr. N.G.P. Arts and Science College, Coimbatore, 01-Aug-15.
- 2) **DST Inspire Internship Science Camp**, Dr. N.G.P. Arts and Science College, Coimbatore, 21-Jul-14 to 25-Jul-14.

#### **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, Coimbatore,17-Mar-22.
- 2) International Webinar on **Tableau for Data Visualization**, Nandha Engineering College, Erode, 17-Jun-20.
- 3) **Applications and Challenges in Data Mining**, Bharathidasan College of Arts and Science, Erode, 24-Aug-17.
- 4) Cyber Security Awareness and Defense Techniques, Dr. N.G.P. Arts and Science College, Coimbatore, 25-Aug-14.
- 5) **ACM Distinguished Speakers Program**, Dr. N.G.P. Institute of Technology, Coimbatore, 30-Jan-
- 6) **Research in Computers: Why, What and How?**, Bharathiar University, Coimbatore, 10-Feb-12.

#### **Participation in Workshop**

1) One Day National Workshop on NEP-2020: Opportunities and Challenges of HEIs in Achieving Gross Enrolment Ratio (GER) in Creating Human Resources to the Paradigm Industry Requirements, Sponsored by Indian Council of Social Science Research, Dr. N.G.P. Arts and Science College, 16-Feb-24.

- 2) One Day Faculty Development Workshop on Gen AI & Data Analytics for HEIs, Association of Self-financing Arts, Science & Management Colleges of Tamilnadu, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore, 05-Jan-24.
- 3) One Day Workshop on Outcome Based Education (OBE), IPSR Solutions Limited, Dr. N.G.P. Arts and Science College, 04-Mar-23.
- 4) **Online Training on IEEE Xplore,** EBSCO Information Services, 25-Aug-2022.
- 5) **Data Analysis Using Python,** Nehru arts and science college, 09-Aug-21.
- 6) Professional Ethics and Plagiarism and Strengthening Research For Quality Publications, Sankara College of Science and Commerce, 31-Aug-19.
- 7) How To Tap Funding Agencies? Publishing Ethics and Plagiarism Tool & Reference Management Tools For Research, Sankara College of Science And Commerce, 02-Mar-19.
- 8) Statistical Analysis using R, Bharathiar University, Coimbatore, 6-Sep-18 to 7-Sep-18.
- 9) **Data Mining using Python**, Nehru Arts and Science College, Coimbatore, 1-Sep-18.
- 10) **Big Data Analytics using Hadoop**, PSGR Krishnammal College for Women, Coimbatore, 8-Feb-18 to 10-Feb-18.
- 11) **Science Academies' Lecture Workshop on Healthcare Analytics**, Dr. N.G.P. Institute of Technology, Coimbatore, 26-Sep-17 to 27-Sep-17.
- 12) **Medical Image Processing using MATLAB and FIJI: A Research Perspective**, Dr. N.G.P. Institute of Technology, Coimbatore, 23-Sep-16.
- 13) **Data Mining & its Applications using Rapid Miner**, Dr. N.G.P. Arts and Science College, Coimbatore, 28-Dec-13.
- 14) **Research Issues in Data Mining and its Practical Approach**, D. J. Academy for Managerial Excellence, Coimbatore, 23-Feb-12.
- 15) **Data Mining Tool WEKA**, Kovai Kalaimagal College of Arts and Science, Coimbatore, 25-Jan-12.

## Participation in Orientation Programme / Short Term Courses

1) **How to do Research in Computer Science**, Hindustan College of Arts and Science, Coimbatore, 21-Jan-15.

## **Participation in Training Programme**

1) National Intellectual Property Awareness Mission, Organized by Intellectual Property Office and MoE's Innovation Cell, India, 24–Apr-23.

## **Participation in Faculty Development Programme**

- 1) One week National Level Virtual FDP on Future Scope of AI in Higher Education, VLB Janakiammal College of Arts and Science, Coimbatore, 19-Feb-24 to 23-Feb-24.
- 2) **7 Days Online Faculty Development Program on Latest Trend and Techniques in Software Engineering: An Industry Perspective,** Christ University, Bangalore, 20-Jan-24 to 27-Jan-24.
- 5 Days International Faculty Development Program on Research Toolbox Reloaded: Amplify your Scholarly Endeavors, Hindustan College of Arts and Science, Coimbatore, 21-Aug-23 to 25-Aug-23.
- 4) **Faculty Development Program on Introduction to Psychology,** IIT Madras (MHRD), Jan-22 to Mar-22.
- 5) Two Day National Online Faculty Development Programme on "Plagiarism in Academic Research & Author Identifiers", Indian Institute of Management and Commerce, Hyderabad, 11-Apr-22 to 12-Apr-22.
- 6) One Week Faculty Development Programme on "Current Trends in Information Technology", Nehru Arts and Science College, Coimbatore, 02-Feb-22 to 09-Feb-22.
- 7) 6 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-21 to 30-Jun-21.
- 8) **FDP on research methodology and Pedagogy for tertiary education**, Dr. N.G.P. Arts and Science College, Coimbatore, 15-Jun-21 to 21-Jun-21.
- 9) **FDP on Being a Super Teacher**, Bannari Amman Institute of Technology from 06-Jul-20 to 12-Jul-20.

- 10) **Quality initiatives in higher education,** Dr. N.G.P. Arts and Science College, Coimbatore, 13-Apr-20 to 20-Apr-20.
- 11) **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-19 To 02-Jun-19.
- 12) **Quality Measures in Higher Education**, Dr. N.G.P. Arts and Science College, Coimbatore, 03-Dec-18 to 9-Dec-18
- 13) **Big Data & Analytics Transitions and Tools**, Dr. G.R. Damodaran College of Science, Coimbatore, 19-Jan-18.
- 14) **Bioinformatics in Life Science & Research**, PSGR Krishnammal College for Women, Coimbatore, 09-Feb-17 to 10-Feb-17.
- 15) **Big Data Analytics**, PSG College of Arts & Science, Coimbatore, 09-Sep-16 to 10-Sep-16.
- Research Issues of Data Mining in Real World, Tamilnadu College of Engineering, Coimbatore, 04-Jan-12.

#### Conference / Seminar / Workshop Organized

- 1) Organizer, International Conference on Research Trends in Computing Technology, Dr. N.G.P. Arts and Science College, Coimbatore, 28-Feb-20 to 29-Feb-20.
- 2) Organizer, National level technical symposium TECHOPEDIA 2020, Dr. N.G.P. Arts and Science College, Coimbatore, 13-Feb-20.
- 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-Sep-19 to 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-Aug-18 to 10-Aug-18.
- 5) Organizer, State Level Technical Symposium Technomania, Dr. N.G.P. Arts and Science College, Coimbatore, 15-Feb-18.
- 6) Organizer, National Conference on Innovations in Communicative World, Dr. N.G.P. Arts and Science College, Coimbatore, 27-Sep-12.

# **Editorial / Review Board Member / Membership in Professional Bodies**

Name of the Professional Body	Nature of membership	Duration
The Society of Digital Information and Wireless	Annual	2018 - 2019
Communications		
International Association of Engineers	Life-time	-

# Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Best Work Paper	Dr. N.G.P. Arts and Science College	2024
Best Mentor	Dr. N.G.P. Arts and Science College	2020
Mentor	NPTEL	2019