

**Name** : Dr. V. Santhana Lakshmi

**Designation** : Associate Professor

**Department** : Department of Computer Science with Data Analytics

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

**Experience** : Teaching - 9 Years 1 Month | Industry – 4 Years 1 Month

**Specialization**: Data Mining, Machine Learning

**Email (Official)** : drsanthanalakshmi.v@drngpasc.ac.in



### Academic Qualifications

Degree	Branch	Institution / University Name	Year
Ph.D.	Computer Science	PSGR Krishnammal College for Women	2025
M.Phil.	Computer Science	PSGR Krishnammal College for Women	2011
M.Sc	Information Technology	Gandhigram Rural University	2007
B.Sc	Computer Science	M.V.M Government Arts and Science College	2005

### Additional Qualifications

Dip. / Cert.	Area of Specialization	Institution / Agency Name	Year
Certificate	Apache Spark 3.0	Databricks	2023
Certificate	Generative AI	GCP	2024
Certificate	Remote Sensing and Digital Image Processing of Satellite Data	NPTEL	2018
Certificate	Data Mining	NPTEL	2018
Certificate	Python for Data Science	NPTEL	2025

### Projects

Project Title	Agency	Amount	Period	Status
College Admission Chatbot	GRG Trust	30000	Sep 2019 - Feb 2021	Completed

## Research Publications

Velusamy, Santhana & Shanmugam, Vijaya. **Leveraging Pretrained Transformers for Enhanced Air Quality Index Prediction Model.** Bulletin of Electrical Engineering and Informatics. 14. 625-637, 2025, 10.11591/eei.v14i1.7968. (Indexed in Scopus).

Santhana Lakshmi V, Vijaya M. S, **An Intelligent Deep Learning based AQI Prediction Models using Pooled Features**, Journal of Theoretical and Applied Information Technology, Vol.102(1),2024,pp.12-28, 2024 (Indexed in Scopus).

Santhana Lakshmi V, Vijaya M. S, **Air Quality Index Prediction Model using Temporal Fusion Transformer**, International Journal of Intelligent Systems and Applications in Engineering. Vol.12(14), pp.418-429, 2024.

Lakshmi, S., & Vijaya, S. **Exploratory Data Analysis on Air Quality Data and AQI forecasting model using deep learning**, European Chemical Bulletin, 12, 2016–2028, 2023.

Santhana Lakshmi V and M.S. Vijaya. **A Study on Machine Learning based Approaches for PM2.5 Prediction**, Lecture Notes on Data Engineering and Communication Technologies, pp. 163-175, 2022 (Indexed in Scopus).

Santhana Lakshmi V and M.S. Vijaya. **An Exploratory Data Analysis on Air Quality Data of Trivandrum**, Lecture Notes in networks and Systems, pp.789-806, 2023 (Indexed in Scopus).

Lakshmi, V.S., Vijaya, M.S. **Feature Selection Techniques for Building Robust Air Quality Prediction Model.** In: Lanka, S., Sarasa-Cabezuelo, A., Tugui, A. (eds) Trends in Sustainable Computing and Machine Intelligence. , 2024 [https://doi.org/10.1007/978-981-99-9436-6\\_13](https://doi.org/10.1007/978-981-99-9436-6_13) (Indexed in Scopus).

V. Santhana Lakshmi, M.S. Vijaya, **Efficient Prediction of Phishing Websites using Supervised Learning Algorithms**, Procedia Engineering, Vol 30, PP 798-805, 2012, ISSN 1877-7058,<https://doi.org/10.1016/j.proeng.2012.01.930> (Indexed in Scopus)

Santhana Lakshmi V, Vijaya M S, **The SVM based Interactive Tool for Detecting Phishing Websites**, International Journal of Computer Science and Information Security(IJCSIS)

Vol. 9 No. 10, October 2011 ISSN 1947-5500

## **Books/ Book Chapters Publication**

**Test your skills in C++**, V.Santhana Lakshmi, R.Kowsalya, Amazon Kindle, 2019

**Machine Learning with R - Lab Manual: Step-by-Step guide for executing Machine Learning algorithms using R**, V. Santhana Lakshmi, 2019

## **Presentations in Conference/ Seminar**

**Feature Selection Techniques for Building Robust Air Quality Prediction Model.** In: Lanka, S., Sarasa-Cabezuelo, A., Tugui, A. (eds) Trends in Sustainable Computing and Machine Intelligence. ICTSM 2023, 05-Oct-2023 and 06-Oct-2023.

**An Exploratory Data Analysis on Air Quality Data of Trivandrum**, 7th International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2022), 09-Dec-2022 and 10-Dec-2022.

**A Study on Machine Learning based approaches for PM2.5 prediction**, 3rd International Conference on Sustainable Communication Networks and Application ICSCN 2021, 29-Jul-2021 and 30-Jul-2021.

**An Efficient Approach to Predict student's performance using supervised learning algorithms**, Two-Day seventh National Conference on Innovations in Information Technology, 25-Feb-2016 and 26-Feb-2016

**Various phishing attacks and supervised learning techniques used for detecting phishing scams**, National Conference on Recent Advances in Neural Networks, Gobi Arts and Science College, Gobichettipalayam, 04-Mar-2011 and 05-Mar-2011

**Efficient Prediction of Phishing Websites using Supervised Learning Algorithms**, International Conference on Communication Technology & System Design, 07-Dec-2011 till 09-Dec-2011

**Predicting the risk level of hepatitis in patients using classification algorithms**, National Conference on Recent Advances in Statistics and Computer Application, Bharathiar University, 21-Dec-2010 till 23-Dec-2010

**An Interactive Dashboard for Product Review Insights using Machine Learning and Word Cloud Visualization**, International Conference on Emerging Trends in Computation & Artificial Intelligence, Providence College, 08-Oct-2025

### **Participation in Conference/Seminar**

**National Level Seminar on Applying Modern Deep Learning Techniques to Natural Language Processing**, Dr. N.G.P institute of Technology, 19-Dec-2019

**National Conference on Recent Advances in Neural Networks** organised by Kongu Engineering, College, Perundurai.

**Emerging Technologies and its Applications in Computers**, Department of Computer Applications, PSG College of Technology, 31-03-2017 and 01-Apr-2017

**Recent Trends in Information Technology**, National Seminar on Recent trends in Information Technology, 11-Oct-2012

**International Conference on Computational Intelligence (ICCI 2010)**, PSGR Krishnammal College for Women, Coimbatore, 09-Dec-2010 till 11-Dec-2010

### **Participation in Faculty Development Programme**

**Computational Biology and Bioinformatics using Python**, PSGR Krishnammal College for Women, 31-Jan-2019

**Internet of Things**, PSGR Krishnammal College for Women, 28-Aug-2018

**Biocomputational Methods using PYTHON & PERL**, PSGR Krishnammal College for Women, 06-Mar-2018

**Datascience and Bigdata Analytics**, ICT Academy, 18-Feb-2017 till 18-Feb-2017

**Introduction to Bigdata Analytics**, ICT Academy, 18-Feb-2017 till 18-Feb-2017

### **Participation in Workshop**

**Industry Conclave and Hands on Workshop on Deep Learning**, PSG College of Technology, 09-Aug-2019 and 10-Aug-2019

**Two Days Workshop on Devops Tool**, Sri Ramakrishna Engineering college, coimbatore, 08-Mar-2019 and 09-Mar-2019

**Two Days National Level Workshop on Artificial Intelligence and Deep Learning**, PSG College of Technology, 23-Jun-2018 to 24-Jun-2018

**One Day Workshop on Machine Learning with Python**, PSGR Krishnammal College for Women, 24-Feb-2018

**Two Days National Level Workshop on Ethical Hacking**, Rathinam College of Arts and Science, 24-Feb-2017 and 25-Feb-2017

**One Day Workshop on Virtual Lab**, Dr. N.G. P Arts and Science College, 24-Jun-2025

### **Invited Speaker**

Resource Person, Guest Lecture on Leveraging Machine Learning for Data Driven Decision Making, Gobi Arts and Science College for Women, 18-Dec-2025