

Name : Dr. P. S. Vijayalakshmi

Designation : Associate Professor

Department : Computer Applications

Qualification : M.C.A., M.Phil.,SET., Ph. D.,

Experience : Teaching: 13 Years 7 months, Industry: 4 years

Area of Specialization(s): Data Mining, Big Data, Deep Learning

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Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Computer Science	SNMV College of Arts and Science, Coimbatore (Bharathiar University)	2023
SET	Computer Science	Bharathiar University	2012
M.Phil.	Computer Science	Bharathiar University	2008
M.C.A	Computer Applications	Bharathidasan University, Trichy	2003
B.Sc.	Zoology	NGM college, Pollachi (Bharathiar University)	1997

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
Diploma in Advanced Network Centered Computing (ANC)	Computer Networks	NIIT	1999
Online Certification	Big data Analytics	NPTEL	2018
Online Certification	Diploma in Machine Learning Using R	Alison	2020

Online Certification	Essentials of Cloud Computing	Infosys Springboard	2024
Online Certification	Java	Infosys Springboard	2025
Online Certification	Bigdata	Infosys Springboard	2025

Books Chapters Published

Title	Authors	Publisher	ISBN
Deep learning algorithms for medical big data Analytics: A study, Current Trends in Multidisciplinary Research	P.S.Viayalakshmi	ESN Publications Research and Development	ISBN :978-93-9196-51-2
Deep Neural Networks for Automated Cyber Security: Identification of Dynamic Malware in Cloud Computer Networks	P.S.Viayalakshmi	Apple Academic Press (AAP) Publications, CRC Press, An international publisher of Taylor & Francis	ISBN: 9781774916346
A review of Big data mining and Hadoop tools with Techniques	P.S.Viayalakshmi	Priyam Publications	ISBN:978-81-973498-8-1
Sentiment Analysis In Healthcare: Methods, Significance, and Uses	P.S.Viayalakshmi	R K Publishers	ISBN: 978-81-976326-8-6
An Effective Data Visualization Overview and Impact	P.S.Viayalakshmi	IGI-Global Scientific Publishing	EISBN13: 9798369378700 .

Foundations and Obstacles of Deep Learning in Healthcare	P.S.Viayalakshmi	IGI-Global Scientific Publishing	EISBN13: 9798369378700
Medical Sentimental Analysis Techniques for Pharmaceutical Exploration Using Deep Learning Techniques	P.S.Viayalakshmi	IGI-Global Scientific Publishing	EISBN13: 9798369370131

Research Publications (Indexed)

International

- **P.S Vijayalakshmi** , M Jayakumar , Wilfred Blessing N.R, “ **Dimensionality Reduction using t-SNE Technique for Fundus Image Analysis in Diabetic Retinopathy**” in the journal Journal of Engineering and Technology Management, Volume74 October–December 2024
- **P. S. Vijayalakshmi**, R. Manimegalai, “**Impact of Internet of Things Protocols in Remote Healthcare and its Applications**” in the journal Journal of Systems Engineering and Electronics ,Volume 34 Issue 9 2024
- **P.S. Vijayalakshmi**, S. Arulmozhi, V.Dharani, “ **Internet of Things in Cloud Computing: Benefits, Challenges and Future Trends**” in the journal Journal of Innovations in Data Science and Big Data Management, Vol. 3, Issue 3 (September –December, 2024) pp:(31-37)
- **P.S. Vijayalakshmi**, S. MuthuKumar , M. Jayakumar ,” **Simply Classified Method in Modified Neural Networks System for Diabetics Type 2 Disease**” in the Journal Tuijin Jishu/Journal of Propulsion Technology , Vol. 44 No. 6 (2023).
- **P.S.Viayalakshmi**, Dr.M.Jayakumar ,“An Overview Of Quantum Computing And Artificial Intelligence: Benefits And Challenges” in the Journal International Journal of humanities, Law and Social Sciences Kanpur Philosophers ISSN 2348-8301, Vol. IX, Issue II No.7 : 2022 (UGC care list)
- **P.S.Viayalakshmi**, Dr.M.Jayakumar , "An Improved Grey Wolf Optimization Algorithm (iGWO) for the Detection of Diabetic Retinopathy Using Convnets and Region based Segmentation Techniques” in the International Journal of Health Sciences, 6(S1), ISSN 2550-6978 E-ISSN 2550-696X , 2022,13100–13118. (Scopus)
- **P.S.Viayalakshmi** , Dr.M.Jayakumar , "Medical Image Analysis Using Deep

Convolutional Neural Networks: Architecture And Its Applications" in the Journal of Multidimensional Research& Review , Vol.2, Iss.2 ,:50-60 ,

- **P.S.Viayalakshmi** , Dr.M.Jayakumar , "An Efficient Deep Intelligent Based MACO-CNN Algorithm for Classification of Diabetic Retinopathy Disease from Retinal Fundus Images" in the Journal Design Engineering 2021 Oct 18:5182-205. (Scopus)
- **P.S.Viayalakshmi** , Dr.M.Jayakumar , "Medical Image Segmentation Using Deep Learning with Faster RNN and UNET Architectures" in the Journal Anvesak, Volume 51 ,Issue 01(xxii), 0378-4568, 2021/1 (UGC care list)
- **P.S.Viayalakshmi** , Dr.M.Jayakumar , "A Review: Deep Learning Techniques Using Image Segmentation for Diabetic Retinopathy" in the Journal STRAD RESEARCH, Volume 7, Issue 8, ISSN: 0039-2049 ,2020/8 (UGC care list)
- **P.S.Viayalakshmi** ,Dr.M.Jayakumar,"A Survey on Insights of Big data Analytics in Healthcare Applications" in the Journal Our Heritage Journal, Volume 68, Issue 1, ISSN 0474-9030, 2020/1 (UGC care list)
- **P.S.Viayalakshmi**, C.Aiswarya "Market Basket Analysis For Frequency And Patten Mining Of Dept. Stores Using Fp Growth And Association Rule Mining" in the Journal IJRAR,Volume 6, Issue 2, E-ISSN 2348-1269 P ISSN 2349-5138, 2019/6(UGC care list)
- **P.S.Viayalakshmi**, K.Tamilselvi "A Review on Impact of Bigdata Analytics in E-Commerce" in the Journal IJRAR, Volume 6, Issue 2, E-ISSN 2348-1269 P ISSN 2349-5138, 2019/6 (UGC care list)
- **P.S.Viayalakshmi**, C.Kumuthini , K.Gomathy , "HIPI: A Review On Hadoop Map Reduce Framework Using Image Processing In Bigdata" in the Journal International Journal of Computer Sciences and Engineering, Volume 6, Issue 8, IJCSE, ISSN: 2347-2693, 2018/10 (UGC care list)
- **P.S.Viayalakshmi**, T Arunambika, "Big Data Management and Processing in Cloud Computing Environments" in the Journal Wireless Communication, Volume 10, Issue 4, 78-80, 2018/4/1 (UGC care list)
- **P.S.Viayalakshmi** ,T Arunambika, " IoT-An Emerging Technology in Real Time Products and their Solutions" in the Journal Automation and Autonomous Systems Volume10, Issue2 , 23-25,2018/2/1. (UGC care list)
- **P.S.Viayalakshmi** ,S.Lakshmi devi,"A Comparative Study: MariaDB Vs MongoDB" in the Journal IJSR Volume7, Issue 1, ISSN (Online): 2319-7064 Index Copernicu, 2018/1. (UGC care list)

- **P.S.Viayalakshmi**, "Facing Security Problems in Big Data and Hadoop" in the Journal International Journal of Science and Research (IJSR) Journal 6, Issue12, 2017/12. (UGC care list)

Presentations in Conferences

- International Conference on Recent Trends in Research and Innovation,” **The Future of Computing: An In-Depth Exploration of Quantum Computing**”, VLB Janakiammal College of Arts and **Science on** march 2025
- International Conference on Computational Intelligence and Communication Technologies “ **An Evaluation Of Pre-Trained Deep Learning Algorithms For Diabetic Retinopathy Disease Identification Using Retinal Fundus Images**” , Dr.N.G.P College of arts and Science on January 2025.
- National Conference on Next Gen Information Science, Communication and Technology, “ **An Audio Recognition Of Animals Using Optimized Deep Learning Techniques For The Conservation Of Wildlife**” , SRM Institute of Science and Technology, Ramapuram, Chennai on 4th October 2024.
- International Conference on Enhanced Techniques in Real-Time Applications , “**Remote Health Monitoring Protocols and its Applications in Internet of Things**” ,United College of Arts and Science on 13th September 2024
- International Conference on Recent Trends in Computer Science and Data Analytics, **Fog Computing: Importance and its Applications**, KPR College of Arts Science and Research on February 02 2024.
- International Conference on Computational Intelligence and Communication Technologies, **Fine Tuning through Artificial Bee colony Algorithm in Convolutional Neural network model for Biomedical Image classification VGG-16 Architecture**, Faculty of Computer Science in Association with ICT Academy & Analytics Society of India,Dr,N.G.P Arts and Science College on 04/01/2024.
- International Conference on Computing and Intelligent systems-2023, **Fine Tuning through Artificial Bee colony Algorithm in Convolutional Neural network model for Biomedical Image classification**, 24,25 January 2023 , Sri Krishna Aditaya College of Arts and Science

- International Interdisciplinary Research Conference on Recent Technological Development in Computational Mathematics and its Applications, **Robotics process automation based detection of diabetic Retinopathy in healthcare**,2.09.2022,One Day, Sri Ramakrishna College of Arts & Science, Coimbatore
- National virtual Conference on Applications of **Intelligent Robotic Process Automation An Effective Deep Learning Algorithms for Big Data Analytics: A Study** ,25th March, 2022 One Day,PSGR Krishnammal College
- International Interdisciplinary Research Conference on "**Recent Technological Development in Computational Mathematics and its Applications Robotics Process Automation Based Detection Of Diabetic Retinopathy In Healthcare**",02nd September,2022,One Day,Sri Ramakrishna College of Arts and Science
- International Conference on Emerging Trends in Science and Technology (ETIST 2021) **Deep Convolutional UNET using Biomedical Image Segmentation for Diagnosis of Diabetic Retinopathy with Optimized Hybrid Duck Traveler and Fruit Fly (hDTFFA) Algorithm** ISBN No.: 978-81-953602-8-4 27th October 2021 One Day,NGM College
- International Conference on Research practices of cutting edge technologies in computing, **A Vision of Deep learning Applications Internet of Things in for Biomedical analysis** 11,12 Nov -2021,2 days, SRCAS
- International Virtual Conference **An Efficient Deep intelligent based MACO-CNN algorithm for DR**,14,15 Oct 2021,2 days, IVC-DIMR
- National Conference-NCERTCST'20 **A New Approach To Implement The Genetic Neuro Hybrid Method To Suppress The Anterior Gradient Of The Pancreatic Cancer Cell Development** 29-Jan-2020, One Day, SNMV College of Arts and Science
- National Conference **Medical Image Analysis Using Deep Convolutional Neural Networks: Architecture And Its Application** 23-Jan-2020 One Day,PSG College of Arts and science
- International Conference **A New Genetic Neuro hybrid approach on Diagnosis of Pancreatic Cancer** 7-Feb-2020 One Day,DR.GRD College
- International Conference- **HIPI: A Review on Hadoop Mapreduce Framework using Image Processing in Bigdata** 9,10 Aug 2018 Two Days,DR.NGP Arts and Science College
- International Conference- **Routing Protocols: Flying Adhoc Networks** 30,31Aug 2018,Two Days,Rathinam Technical Campus

- International Conference- Data Science and Analytics-Secure Data management in Distributing cloud computing 23-Sep-2017 One Day,Rathinam Technical Campus
- International Conference- **Data Science and Analytics-Facing Security problems in Bigdata and Hadoop** IJSR ISSN (Online): 2319-7064,2017 One Day,Rathinam College of Arts and Science

Participation in Conference

- International Conference on **Digital Innovations in Business and Service Sectors** participated Organized by the Departments of Commerce and Computing Sciences Patrician College of Arts & Science in collaboration with Don Bosco Arts & Science, College on 13th September 2024.
- National Conference on **E-Commerce Applications** 9-Sep-19 One Day, SNMV College of Arts and Science
- International Conference on **Impact of Bigdata Analytics** in E-Com,4-Sep-19,One Day SNMV College of Arts and Science

Participation in Seminars & Webinars

- Participated in the webinar "**Unlocking Potential: Embracing the AI Revolution**" organized by the Computer Society of India - Coimbatore Chapter on 12th February 2025.
- ICSSR Sponsored National seminar on IOT Security: Challenges and Solutions for Social and Real life Applications, **Security Issues for Internet of Things in Cloud Environment**, Dr.N.G.P Arts and Science College on 05 January 2024.
- Two-Day National Seminar on Intelligence Reform: Enhancing National Security Through Effective Intelligence Practices, **Potential Growth Of Medical Artificial Intelligence In Healthcare**, Sri Krishna College of Arts and Science on December 20 & 21 , 2023
- Webinar **NAAC Accreditation and Assessment process** 15.10.2022,One Day, SNMV CAS
- **DELNET Webinar Research and Publication Ethics**,30.11.2022,One Day, SNMV CAS
- Webinar **Style Manuals and Reference Management Software**,20 Jan-2021,One day, Christ College
- Webinar (Elsevier) **How to publish in and optimize resources for ground breaking journals**,25-Feb 2021,One day, Researcher Academy

- National Webinar “**Art of Writing and Publishing Research Papers**” 21st and 22nd January, 2021 Two days, Rajagiri College of Management and Applied Sciences
- International Seminar “**Nuances and Trends in Data Science**,” 26th to 30th July 2021, 5 days, Hindustan CAS
- Webinar (Elsevier) **Strengthening research planning and Execution skills**, 15-Nov 2021 1 day, CHARUSAT University
- Webinar **360 degree view on research management & academic journal publishing**, 12 November, 2021, 1 day, Researcher Academy and Indian Council of Medical Research
- National Webinar **Academic writing and publishing**, 2 Aug 2021, 1 day, MES Asmabi College
- National Webinar **Awareness on IPR and its Management**, 20/10/2021 to 22/10/2021, 3 days, Sri Ramakrishna College of Arts and Science
- National Level Seminar CSI Student Chapter **Citation Management Using Mendeley** 28th September 2021, 1 day, Sri Ramakrishna College of Arts and Science
- Webinar **Outcome based Education** , 24/11/2021, 1 day, SNMV CAS
- Webinar **How to Publish Top Grade Scientific Research Articles**, 8th December, 2021, 1 day, Bhagwan Parshuram Institute of Technology
- Webinar **Ethics of publication** , 23 November, 2021, 1 day, Indian Council of Medical Research
- Webinar **Intelligence to machine learning** 11/6/2021 day, Hindustan College of Arts and Science
- International Seminar **Research in Computers why, what and how? Industry 4.0**, 3-Mar-2020, one Day, Bharathiar University
- National Level Seminar **Cyber security and Ethical Hacking**, 11-Feb-2020, One Day, St. Paul College of arts and science
- Webinar (Elsevier) Science Direct: **Read Quality and Publish quality**, 18-Dec-2020, KPR IET
- Webinar **ANALYTICS SERIES** organized by the Department of Computer Science, 27th and 28th May 2020, 2 days, AVP College of Arts and Science
- Webinar **Fine tuning your research papers publication of Scopus, web of science, and ABDC journals** , 27/5/2020, 1 day, Bharatha matha college
- Webinar **Covid-19 Stress Management through Yoga**, 17 May 2020, 1 day, Nature Science Foundation
- State Level Seminar on **Recent Trends in Information Technology**, 30-Aug-2018, One

Day Michel Job Collage of arts and science

- State Level Seminar **Importance of Human Values in the present Scenario**,11-Dec-2018,One Day,St.Paul College of arts and science
- National Seminar Contemporary trends in Big data analytics 24-Aug-17,One Day Sri Ramakrishna College of Arts and Science

Participation in Workshop

- Workshop (DST) **Awareness of I-STEM portal for use of the R& D Resources**,29-Mar-2021 to 30-Mar-2021,Two days, Bharathiar University
- Workshop **Dynamic web site creation using python/flask/mysql**,10/11/2021,1 day, Akkaam and KOVAI CUNSLTANCY SERVICES
- Workshop Research article Writing & Reference Management Using Mendeley 22nd June 2020,1 day, Annamalai University in collaboration with ELSEVIER
- Workshop Enhancing Research Communication Skills through ScienceDirect and Mendeley 3 May 2020,1 day, Dayalbagh Educational Institute
- National Workshop **Awareness on revised NAAC norms and Procedures** 17-Aug-2019 One Day, SNMV CAS
- Workshop **Web Development using Python and MYSQL** 29-Jun-2019 One Day AKKAM Institute
- Workshop **R Programming(Data Analytics)** 20-Jul-2019 One Day, AKKAM Institute
- One Day **workshop Preventive Measures for Cyber security Threats** 28-Feb-2018One Day, Hindustan college of Eng and Tech

Participation in Orientation Programme / Short Term Courses

- Online Training Program **Introduction to Industry 4.0**,23-Dec -2020 to 10-Feb 2021,30 days, Bharathiar University with MHRD BU RUSA PHASE –II BEICH
- STTP(AICTE) **Recent Trends and Challenges in Data science**,04-Jan -2021 to 09-Jan-2021,6 Days, Hindustan college
- STTP **Research Trends and challenges**,22 nov-2021 to 27 nov 2021,One week, Sona CAS
- Refresher Programme **Recent Trends in IoT and its Applications**17 dec 2021 to 23 dec

2021,8 Days, Kavery Eng.College

- STTP(AICTE) Block chain and Artificial Intelligence towards the next big Technological Revolution,7-Dec-2020 to 12 Dec 2020,6 days, KSR College of Tech.

Participation in Faculty Development Programme

- One week National level online FDP on **AI tools** organized by KG college of arts and science with Brainovision from 17.02.2025 to 21.02.2025
- Five Days National online FDP on **Beyond Boundaries: Driving Innovations and Research** organized by Auxillum College, Vellore from 26.12.2024 to 30.12.2024.
- Seven Days International Virtual FDP on **Implications of Emerging Computing Technologies** organized by Hindustan college of arts and science, Coimbatore from 29.07.2024 to 04.08.2024.
- Five Days International Virtual FDP on "**Exploring New Frontiers in Teaching Tools, AI and Data Analytics**" organized by MEASI Institute of Information Technology, Royapettah, Chennai from 29-07-2024 to 02-08-2024.
- Five days Online FDP on **Intellectual property rights in the age of AI,ML, Cyber security and Blockchain** organized by Mangalmay Institute of Management and Technology on 24.06.2024 to 28.06.2024.
- Five days Online FDP on **AI insights: Predictive power of ML, DL, NLP** organized by Spoorthy Engineering College on 14.05.2024 to 18.05.2024
- 7 DAYS NATIONAL LEVEL FDP ON **PYTHON** ” organized by Star International Foundation for Research and Education on 19.03.2024 to 25.03.2024.
- Five Days International Virtual FDP on Emerging Trends in Data Analytics , from 22 /01/2024 to 26 January 2024 , KG CAS.
- FDP on **Entrepreneurship and Teaching Methodology**,12 to 18/07/2023,5 Days, SNMV CAS with Whadwani Foundation
- Five days FDP International Webinar series on **Research Tools and Methodologies**, 07/06/2023 to 13/06/2023 at Sri Krishna Aditya college of arts and science
- Seven days National level FDP on Digital Transformation of Technology, 20/09/2023 to 27/09/2023, Hindustan college

- International Webinar Research Tools and Methodologies,7/6/2023 to 13/6/2023,5 days
- FDP **Recent Research trends and challenges** 14/9/2023 to 19/9/2023,5 days, KG CAS
- FDP **Data science specialization using Python**,10/7/14/7/2023,5 days, Novitech R & D
- National Level Faculty Development Programme “**Transformation in Teaching Learning Process**”,12 feb 2022 to 13 feb 2022, PSG CAS
- FDP Five Days National Level FDP on “**Artificial Intelligence and Cloud Services** 31-10-2022 to 04-11-2022,5 Days, Sri Ramakrishna CAS
- National Level Virtual FDP **Recent Trends in Research Methodologies and Tools** 10.10.2022 to 14.10.2022,5 Days, KG CAS
- FDP Contemporary Innovative Tools for Learning and Teaching,23/12/2022 One day , SNMV CAS
- National Virtual FDP **Ethics in Research & Research Methodology**,19/12/2022 to 26/12/2022,8 days, KG CAS
- National Virtual FDP **Recent trends in research methodologies and tools**,10.10.2022 to 14.10.2022,5 days, KG CAS

- Two Days Faculty Development Program "**Adoptive Approaches for Modern Teaching and Research** 15 nov 2021 to 23nov 2021 8 Days, SNMV CAS
- FDP **Artificial Intelligence and Cyber security** 6-feb-2021 to 11-Feb-2021,6 Days, Karpaga vinayaga Eng.College
- National level FDP **Cloud Computing** 29-nov -2021 to 8-dec-2021,10 days, Sri Krishna College of arts and science
- FDP **Research Development Programme For Faculty in Recent Trends** 09.08.2021 to 13.08.2021,Five Days, SRM Institute of Science and tech.
- FDP Python programming and machine learning ,25,26 june 2020 2days, KCS CAS
- FDP Identifying online resources for writing research papers 13,14 June 2020,1 day, Viyas holistic Academy
- FDP Drupal (Open Source Content Management System) 11-05-2020 to 15-05-20205 days, SNMV CAS with Spoken Tutorial Project, IIT Bombay
- International FDP **Enhancing your IT skills during quarantine** 18-23 may 2020 ,6 days, Bishop Appasamy CAS
- FDP Unlock your teaching skills via ICT Tools,24/5/2020 1 day, APA college
- **Greening Program** at Institute of Forest Genetics and Tree breeding Greening Program9-Nov-17,2020 One Day,Institute of Forest Genetics and Tree breeding
- FDP on **Research Methodology** Research Methodology ,10-Mar-17 One Day,Rathinam CAS
- FDP on **Data Science and Analytics** by ICT Academy,Data Science and Analytics,Jun 5 2017 to Jun 9 2017,Five Days KPR IET
- FDP **Research methodology** 10/3/2018,1 day, Rathinam College of arts and science
- One day **Faculty Enrichment Program** , 28-May-19 One Day SNMV CAS
- FDP **Android App Development** in Hindustan CAS ,2-Mar-19,One Day Hindustan CAS