

Name: **Dr. Helen Josephine V.L.**

Qualifications: MCA, M.Phil, Ph. D

Personal Mail ID : helenjose.cbe@gmail.com

Mobile No. : 9108873478

Professional web link: <https://christuniversity.in/Business%20and%20Management/faculty-details/NTY0Mg==/MzAx>

Areas of teaching and research interests:

- Machine Learning A Fundamentals of Business Analytics, Natural Language Processing, Statistics for Managers, IoT, AI, Cloud Computing.
- Python, R, Java Programming, Advanced Java, Cloud computing, Data structure, DBMS, C# and .NET, Tableau,

Dr. Helen Josephine V L is an Associate Professor specializing in Business Analytics at the School of Business and Management, Christ University, Bangalore. With over 27 years of combined academic and industry experience, she began her career as a software engineer, working in reputed companies across India and Singapore. She transitioned to academia after 12 years in the software industry and has since accumulated 15 years of teaching experience in engineering colleges and universities. Dr. Helen holds an MCA from St. Joseph's College, Bharathidasan University, and M.Phil and Ph.D. degrees from Bharathiar University. She also completed MBA – Operations and supply chain management at Pondicherry University.

Her teaching expertise spans a wide range of subjects, including Business Analytics, and Data Science courses, Machine Learning, Deep Learning, Cloud Computing, Internet of Things, She is also proficient in various programming languages, such as Python, R, Java, C++, and more. Dr. Helen's research focuses on applying artificial intelligence, machine learning, and natural language processing to solve real-world business problems, with particular interest in recommender systems and sentiment analysis.

An active researcher, Dr. Helen has more than 20 publications in Web of Science and Scopus-indexed journals, and she has authored several book chapters. She has published nine patents in the fields of AI and IoT and serves as a Ph.D. supervisor under Visvesvaraya Technological University and Christ University. She has been involved in multiple projects, including a 20-lakh ICSSR project, and is a reviewer for several prestigious journals. Dr. Helen's extensive industry and academic background make her a key contributor to both education and research.

Technical Skills

Languages : C, C++, C#, VB, C#, Java, Adv. Java, Python, R

Data visualization tool : Tableau, PowerBI

Web/UI : ASP.NET, MVC, JavaScript, HTML, CSS, VScript
Database : MS SQL Server, MYSQL
IBM Tool : Advanced Application Communications System/2 ([A2CS](#))
IDE : VS Code, PyCharm
Framework : Flask Framework

MOOC / Certification / MDP

- Management Development Program on “**Strategic decision making for leaders through AI and Analytics**”, Organized by Indian Institute of Management, Ahamedabad, 15th to 19th Jan 2024.
- NPTEL Certification on “Business Analytics & Data Mining Modeling Using R Part II” – 25th Sep 2022.
- Eduonix Online Certification on Learn Machine Learning by Building Projects – 23rd Dec 2019 to 27th Feb 2020.
- NPTEL Certification on Machine Learning for Engineering and Science Application, April 2019.
- Udemy certification on Complete Guide to TensorFlow for Deep Learning with Python, 2018.
- Coursera MOOC certification on Natural Language Processing in Python, 2018.

Educational Qualifications

Degree	Specialization	Institution/Country	Year of Graduation
Ph.D	Computer Science	Bharathiar University, Coimbatore	2019
M.Phil.	Computer Science	Bharathiar University, Coimbatore	2014
Master Degree	M.C.A	St. Joseph’s College, Bharathidasan University, Trichy - 76%	1996
Bachelor Degree	Mathematics	Holy Cross College Bharathidasan University, Trichy. - 83%	1993

Publications

Scopus Indexed

1. Josephine V.L.H, Thaliyan, D., Joseph, J., Exploring the Top ChatGPT Libraries for Powerful Conversational AI. In Improving Library Systems with AI: Applications, Approaches, and Bibliometric Insights (pp. 72-84)(2024). IGI Global.
2. Josephine, V.L. H, Joy.J. et.al, A Smart Internet of Things (IoT) Enabled Agricultural Farming System Intelligent Decision Support System for IoT-Enabling Technologies: Opportunities, Challenges and Applications, 2024, pp. 59–72
3. Josephine V.L. H, Rajan.D., Forecasting a Fast-Moving Consumer Goods (FMCG) Company's Customer Repurchase Behavior via Classification Machine Learning Models, *ACM International Conference Proceeding Series*, 2023, 14.

4. Josephine, V.L.H., Joy, J., Krishna, M.C., Muniappan, S.S., Dutta, U., Innovative constraints formulation in timetable planning for efficient resource allocation in academic institutions, *Sustaining Higher Education Through Resource Allocation, Learning Design Models, and Academic Development*, pp. 228-249, 2023
5. Josephine, H.V.L., Kumar, P.T., Joy, J., Mansurali, A., Implementing Ensemble Machine Learning Techniques for Fraud Detection in Blockchain Ecosystem, 2nd International Conference on Automation, Computing and Renewable Systems, ICACRS 2023 – Proceedings, pp. 1980-1985, 2023
6. Helen Josephine, V.L., Rajan, D., Enhancing Customer Experience and Sales Performance in a Retail Store Using Association Rule Mining and Market Basket Analysis, 2023 14th International Conference on Computing Communication and Networking Technologies, ICCCNT 2023, 2023
7. Helen Josephine, V.L., Mahara, T., Srinivasan, R., Algarni, A.D., Verma, O.P., Deep vs. Shallow: A Comparative Study of Machine Learning and Deep Learning Approaches for Fake Health News Detection, *IEEE Access*, 11, pp. 79330-79340, 2023
8. Helen Josephine, V.L., Sudarson Rama Perumal, T., Gaurav, G.S., ...Joshua Samuel Raj, R., On Automatic Target Recognition (ATR) using Inverse Synthetic Aperture Radar Images, 6th International Conference on Inventive Computation Technologies, ICICT 2023 – Proceedings, pp. 953-956, 2023
9. Josephine, V.L.H., Panneerselvam, K., Mahesh, K., ...Kumar, A.R., Effective and Efficient Video Compression by the Deep Learning Techniques, *Computer Systems Science and Engineering*, 45(2), pp. 1047-1061, 2023,
10. Josephine, H.V.L., Vedaiyan, R., Xavier, V.M.A., Lakshmi, D., Raj, J.S., Hybrid Bacterial Foraging Optimization with Sparse Autoencoder for Energy Systems, *Computer Systems Science and Engineering*, 45(1), pp. 701-714, 2023
11. Josephine V. L, H., Pardal, H., Nagarajan, K., Mahara, T., Global and Indian Perspectives on Russia-Ukraine War using Sentiment Analysis, *ACM International Conference Proceeding Series*, 2022
12. Helen Josephine, V.L., Chalapathy, N., Rajalakshmi, K., Sales Prediction Scheme Using RFM based Clustering and Regressor Model for Ecommerce Company, *ACM International Conference Proceeding Series*, 2022
13. Helen Josephine, V.L., Panneerselvam, K., Rajalakshmi, K., ...Mahesh, K., Tesfaye, M., Improving the Security of Video Embedding Using the CFP-SPE Method, *Journal of Engineering (United Kingdom)*, 2022
14. V L, H.J., Vedaiyan, R., Raj, R.J.S., Wireless Sensor Networks in Precision Monitoring of Crops, *International Conference on Sustainable Computing and Data Communication Systems, ICSCDS 2022 – Proceedings*, pp. 1099-1105, 2022
15. Helen Josephine, V.L., Samuel Raj, R.J., Anantha Babu, S., ...Varalatchoumy, M., Kathirvel, C., Implementing Multiclass Classification to find the Optimal Machine Learning Model for Forecasting Malicious URLs, *Proceedings - 6th International Conference on Computing Methodologies and Communication, ICCMC 2022*, pp. 1127-1130, 2022
16. Josephine V. L., H., Rajan, D., Rajalakshmi, K., A Review Paper on Various Energy Saving Techniques in WSN, *Proceedings of the International Conference on Electronics and Renewable Systems, ICEARS 2022*, pp. 688-692, 2022
17. Helen Josephine, V.L., Joshua Samuel Raj, R., Varalatchoumy, M., ...Meqdad, M.N., Nam, Y., Evolutionary algorithm based task scheduling in iot enabled cloud environment, *Computers, Materials and Continua*, 71(1), pp. 1095-1109

18. Helen Josephine, V.L., Thiagarajan, G.A systematic review on how blockchain unlock business values, Proceedings of the 5th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), I-SMAC 2021, pp. 1484-1487, 2021
19. Helen Josephine, V.L., Duraisamy, S., Novel pre-processing framework to improve classification accuracy in opinion mining, International Journal of Computing, 17(4), pp. 234-242, 2018.
20. Gain ratio feed forward neural network algorithm to improve classification accuracy, Helen Josephine, V.L., Duraisamy, S., International Journal of Engineering and Technology(UAE), 7(4), pp. 3579-3582, 2018

Publication Internation Journal

1. Dr. Helen Josephine V L, et. al., "Enhanced Privacy With Disrupted Data By Choosing Features" in Turkish Journal of Computer and Mathematics Education. Vol. 12 No. 2(2021), 1659-1668, April 2021
2. Helen Josephine V L, et. al., "Comparative analysis of various classification techniques to predict and detect Breast Cancer Using R" <https://doi.org/10.30534/ijeter/2020/378102020>. Oct 2020 (Scopus Indexed)
3. Dr. Helen Josephine, Dr. V.S. Prakash, Dr. Aruna Devi M, "Genetically Optimized Gain Ratio Feed Forward Neural Network Algorithm for Review Opinion Classification", International Journal of Psychosocial Rehabilitation, ISSN 1475-7192, Vol. 24, Issue 02, pp. 4429-4441, Feb 2020. (Scopus Indexed)
4. Dr. Helen Josephine, Gomathi Thiagarajan, Dr. V.S. Anita Sofia, "Role of Artificial Neural Network in Opinion Classification", International Journal of Psychosocial Rehabilitation, ISSN 1475-7192, Vol. 24, Issue 02, pp. 4407-4416, Feb 2020. (Scopus Indexed)
5. Dr. Helen Josephine V L, Dr.V. Prakash, A. Devakumari. (2020). Proficient Cluster Based Privacy Conservancy Data Perturbation Strategy In Multi-Partitioned Datasets. International Journal of Advanced Science and Technology, Vol. 29 Issue 11, pp.2988-2997, May 2020 (Scopus Indexed)
6. Helen Josephine V.L and Dr. S. Duraisamy, "Opinion Mining using Machine Learning Techniques", International Journal for Research in Engineering Application & Management (IJREAM), ISSN : 2454-9150, Vol. 04, Issue - 5, pp. 374-378, Oct 2018.
7. K. Vivekanandan and V.L. Helen Josephine, "ROM - Review Opinion Mining a Novelized Framework", International Journal of Computer Sciences and Engineering, Volume-02, Issue11, Page No (86-89), Nov -2014, E-ISSN: 2347-2693

Conference presentation

1. Dr. Helen Josephine presented research paper titled, Data Mining Techniques to Enhance Customer Segmentation and Targeted Marketing Strategies at Fifteenth international conference on computing, communication and networking technologies Data Mining

Techniques to Enhance Customer Segmentation and Targeted Marketing Strategies organized by IIT Mandi and IEEE, June 2024.

2. Dr. Helen Josephine presented paper titled, "Enhancing credit risk analytics: A comprehensive Approach using machine learning and forecasting.", Fourth National Conference on Innovations in Information and Communication Technologies 2024 (NCIICT) at Bannari Amman Institution of Technology, March 2024.
3. Dr. Helen Josephine presented paper titled, "Forecasting renewable energy adoption in BRICS countries", Fourth National Conference on Innovations in Information and Communication Technologies 2024 (NCIICT) at Bannari Amman Institution of Technology, March 2024.
4. Dr. Helen Josephine presented paper titled, "Implementing Ensemble Machine Learning Techniques for Fraud Detection in Blockchain Ecosystem", 2nd International Conference on Automation, Computing and Renewable Systems, ICACRS 2023, Dec. 2023.
5. Dr. Helen Josephine presented paper titled, "Forecasting a Fast-Moving Consumer Goods (FMCG) Company's Customer Repurchase Behavior via Classification Machine Learning Models" at 5th International conference on INformation management and Machine Intelligence (ICIMMI 2023) organized by Poornima Institute of Engg and Tech., & Scopus, on 14th Dec 2023
6. Dr. Helen Josephine presented paper titled, Bridging the Gap: Using Sentiment Analysis to Align Online Courses with Student Expectations, 2nd Lincoln International HE Practices Conference, at S P Mandali's Prin. L. N. Welingkar Institute of Management Development & Research, Bengaluru, Nov 2023.
7. Dr.Helen Josephine, presented paper titled, Empowering Decision-Making in Manufacturing Industry through Insights from Demand Forecasting and Time Series Models IEEE International Conference on Multidisciplinary Research in Technology and Management - MRTM 23 at New Horizon College of Engineering, Bengaluru, Sep 2023
8. Helen Josephine, V.L., Rajan, D., Enhancing Customer Experience and Sales Performance in a Retail Store Using Association Rule Mining and Market Basket Analysis, 2023 14th International Conference on Computing Communication and Networking Technologies, ICCCNT 2023, 2023
9. Helen Josephine, V.L., Sudarson Rama Perumal, T., Gaurav, G.S., ...Joshua Samuel Raj, R., On Automatic Target Recognition (ATR) using Inverse Synthetic Aperture Radar Images, 6th International Conference on Inventive Computation Technologies, ICICT 2023 – Proceedings, pp. 953-956, 2023
10. Dr.Helen Josephine presented paper titled "Data Analytics and Automation for a Broadband Franchise" in National Conference on PORT, MARITIME & MULTIMODAL LOGISTICS REBUILDING THE GLOBAL ECONOMY atAMET BUSINESS SCHOOL, AMET University Chennai, on 12/04/2023.
11. Dr. Helen Josephine presented paper titled An End-To-End Machine Learning Model To Predict The First Innings Score In Ipl at Human Machine Interaction in the Digital Era (ICHMIDE-2023) organized by SRM University & AIMST University. Malaysia, on 24/02/2023
12. Dr. Helen Josephine presented paper titled Contact to Customer Lead Generation Predictive Model using Machine Learning Techniques at 2nd International Conference on Recent Trends in engineering, Technology and Business Management (ICRTETBM 2023) 23rd International Business Horizon INBUAH ERA World Summit 2023 on 22/02/2023 organized by Amity International Business School, Amity Centre for interdisciplinary Research
13. Dr. Helen Josephine presented paper titled Understanding the Paradox of Employer-Employee Relationship Using Text Analytics at 2nd International Conference on Recent Trends in engineering, Technology and Business Management (ICRTETBM 2023) 23rd International Business Horizon

INBUAH ERA World Summit 2023 on 22/02/2023 organized by Amity International Business School, Amity Centre for interdisciplinary Research

14. Josephine V. L., H., Pardal, H., Nagarajan, K., Mahara, T., Global and Indian Perspectives on Russia-Ukraine War using Sentiment Analysis, ACM International Conference Proceeding Series, 2022
15. Helen Josephine, V.L., Chalapathy, N., Rajalakshmi, K., Sales Prediction Scheme Using RFM based Clustering and Regressor Model for Ecommerce Company, ACM International Conference Proceeding Series, 2022
16. V L, H.J., Vedaiyan, R., Raj, R.J.S., Wireless Sensor Networks in Precision Monitoring of Crops, International Conference on Sustainable Computing and Data Communication Systems, ICSCDS 2022 – Proceedings, pp. 1099-1105, 2022
17. Workmen absenteeism in a manufacturing setup - prediction using random forest Presented at International Conference on Business Data Analytics 2022 by Uttranchal University during 07-08 October 2022
18. Helen Josephine, V.L., Samuel Raj, R.J., Anantha Babu, S., Varalatchoumy, M., Kathirvel, C., Implementing Multiclass Classification to find the Optimal Machine Learning Model for Forecasting Malicious URLs, Proceedings - 6th International Conference on Computing Methodologies and Communication, ICCMC 2022, pp. 1127-1130, 2022
19. Food Production and Environment Sustainability paper presented at 3rd Rajagiri Management Conference on Sustainable Development Goals in the post-pandemic world organized by Rajagiri Business school and Rajagiri College of Social Sciences, Kochi, 22/04/2022
20. Josephine V. L., H., Rajan, D., Rajalakshmi, K., A Review Paper on Various Energy Saving Techniques in WSN, Proceedings of the International Conference on Electronics and Renewable Systems, ICEARS 2022, pp. 688-692, 2022
21. IOT Based Healthcare To Improve Efficiency at National Conference on Natural Language Processing and Computation organized by Dhanalakshmi Srinivasan College of Arts and Science for women on 22/04/2022
22. Helen Josephine, V.L., Thiyagarajan, G. A systematic review on how blockchain unlock business values, Proceedings of the 5th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), I-SMAC 2021, pp. 1484-1487, 2021
23. Impact of hidden dense layers in convolutional neural network to enhance performance of classification model on IOP Conference Series: Materials Science and Engineering 1131 (1), 012007
24. Dr. Helen Josephine et. al , "Impact of Hidden Dense Layers in Convolutional Neural Network to enhance Performance of Classification Model" in 4th International Conference on "Emerging Technologies in Computer Engineering Data Science & block Chain Technology ICETCE2021", at SKIT, Jaipur. Feb 2021 doi:10.1088/1757-899X/1131/1/012007.

Book

1. Fundamentals of Principles of Machine learning, Blue Duck publications, ISBN: 978-81-971565-4-0, May 2024
2. Data Analytics with Python, JEC Publications. ISBN: 978-9357493000, Jan 2023

Patent

1. 202341076031 (2023), AUTOMATIC AUTOMOBILE TURNING INDICATOR (AATI)
2. 398699-001– Design Patent (2023): Table Frame
3. 202341023028 (2023) IOT Based Smart Wet Grinder System for work from home community
4. 202341022092 – (2023): Smart IOT-enabled water tank cleaning and maintenance system for efficient and automated maintenance.
5. 382140-001 - – Design Patent (2023): Manual washing machine
6. 202241067059 – (2022), AI-BASED REAL-TIME CLASS ENGAGEMENT EMOTIONS MONITORING SYSTEM
7. 202241047525 – (2022), “SMART INTERNET OF THINGS (IOT) ENABLED AGRICULTURAL FARMING SYSTEM”
8. 202041039856 – (2020), “LPG STOVE CONTROLLER SYSTEM USINGINTERNET OF THINGS (IOT)
9. 202041039900 – (2020) Building Family Tree with birth certificate and preserving using block chain on 15th Sep 2020 - Application No. 202041039900.

Research Project

- Review Opinion Mining (ROM) Classification Model has been proposed based on soft computing approaches such as artificial neural network and genetic optimization algorithm-based opinion classifier are introduced. The research work is carried out as a threefold process.
 - SWSF (Significant Word, SVD, and Filtering) pre-processing algorithm is proposed to prepare and clean the raw and unstructured mobile learning app review document.
 - Neural network-based algorithm GR-FFNN (Gain ratio Feedforward Neural Network) was developed to improve classification accuracy in opinion mining.
 - GR-FFNN neural network classifier parameter namely momentum and learning rate are optimized through Genetically Optimized GR-FFNN algorithm.
- Implementation is done in python using Anaconda.
- Resulted in numerous publications in Scopus indexed journal with high impact factor

Academic Project

.NET Project -

CMIR Institute of Technology, Bengaluru

Developed in house project Research Paper Review System in .NET and SQL Server

- Involved in requirement gathering, analysis and design, development, testing, debugging and fine-tuning phases.
- Designed and developed Business Logic using C#. Developed ASP.Net pages in C#.Net to meet the business requirements using Visual Studio.Net.
- Create Master Page using C#. Involved in design, coding using C# and implementation of role-based security to allow user access limited to only authorize data & modules.

- Extensively used ADO.Net and the Dataset for handling Database activities. Used Data Grids, Data Sets, Data Views, Data Adapters and Data Readers to extract data from Backend SQL Server 2012.
- Designed and developed front end GUI in C# .NET and used **ODBC connection** with back-end SQL server which are used for inserting, updating and deletion of data to the database.

Machine learning Project

- Participating in Data Pre-processing Techniques to make data useful for creating Machine Learning Models
- Building various regression and classification algorithms by using various Sklearn libraries such as Linear Regression, Decision Trees and Naïve Baye's.
- Involved in Machine Learning Pipeline, Data Gathering, Pre-processing, Feature Selection, Feature Engineering Model Creation and Hyper parameter tuning.
- Designing the neural networks using TensorFlow, Keras for various internal projects
- Deployment of Machine Learning and Deep Learning Models in clouds.

Contribution to Health Care

- Diabetes Onset Detection by using Deep Learning Grid Search - Batch size, Epochs, Learning Rate, Dropout, Initialization, Activation and Neurons selection.
- Detection of Breast Cancer using Machine Learning Technique - Support vector machine (SVM) and K-Nearest Neighbour (KNN) classification techniques were used to detect Breast Cancer.
- Conceptualized & implemented a sentiment analysis tool to rate the financial competence of companies
- Built CNN model to classify if a person has a Tumor or not base on MRI Scan.
- Built Mask detector Model using computer vision, OpenCV

Contribution to Finance

- Stock Market Clustering using KMeans and PCA. In this project, unsupervised machine learning technique, K-means clustering used to a group of companies to analyze the similarities.
- Customer Categorization using K Means Clustering
- Created charts in Jupyter notebook o perform preliminary analysis and visualize data using Matplotlib

Selected Industry Projects

AbacusWhiz V 2.2.0 and 2.2.1

Abacus Intl. Pvt. Ltd., Singapore

- In a team of Six, implemented and tested Abacus Whiz, windows application provides travel agents with an easy and convenient way to access the Abacus Central Reservation System and the Abacus Global Distribution System.

- Used IBM Advanced Application Communications System/2 (A2CS) – V Script.

AbacusWhiz V 2.2.1 Customization in AMEX

Abacus Intl. Pt. Ltd., Singapore

- In a team of Two, designed and implemented Abacus Whiz V2.2.1 customization in AMEX, in the modules such as Basic Booking Information, Fare options, Print Host Itinerary, Referral, DSS Consolidator Air, Non AirSale, Non AirSale, MCO/MPD Air, Accounting Data Creation, Ticketing, Voids Spoils, QC Errors.
- Used IBM Advanced Application Communications System/2 (A2CS) – V Script.

Purchase Order System & Stock Inventory System

JMA Ptd Ltd., Singapore

- In a team of Two, Develop and debug Visual Basic 6.0 applications with Sql server 2000 databases. Clients include Atlantic Shipyard Pvt. Ltd. Singapore
- This windows application allows the Sales Personnel to record down the inventory and delivery details.
- Inform the Purchasing Personnel that those products with the quantity that less than the threshold (less than 50) units and allow the Purchasing personnel to order the product from the supplier.

Patents

1. – Design Patent (2023):
2. Patent published “IOT Based Smart Wet Grinder System for work from home community” on 29th April 2023, Application No. : 202341023028
3. Patent published SMART IOT-ENABLED WATER TANK CLEANING AND MAINTENANCE SYSTEM FOR EFFICIENT AND AUTOMATED MAINTENANCE, on 07 April 202, Application No. : 202341022092 ” on 29th April 2023, Application No. : 202341023028
4. Patent Published ”AI-BASED REAL-TIME CLASS ENGAGEMENT EMOTIONS MONITORING SYSTEM”, on 23-Dec-2022 Application No : 202241067059
5. Patent Published “SMART INTERNET OF THINGS (IOT) ENABLED AGRICULTURAL FARMING SYSTEM” on 26-Aug-2022 Application No : 202241047525
6. Patent Published “LPG STOVE CONTROLLER SYSTEM USINGINTERNET OF THINGS (IOT)’ on 15th Sep 2020 – Application No. 202041039856
7. Patent Published ”Building Family Tree with birth certificate and preserving using block chain on 15th Sep 2020 - Application No. 202041039900.

Invited Talks

1. Resource person in One Week FDP and Research Conclave on "Artificial Intelligence in Affective Computing Research," session titled "Emotional Empathy in Agents/Machines/Robotics, 10th to 15th June 2024, organized by Department of Computer Applications, CMR Institute of Technology, Bengaluru.
2. Delivered lecture and hands on session in Faculty Development Programme and Research Conclave titled “Artificial Intelligence and Computational Techniques for STEM Research” on the topic “Data Analytics Implementation for Business Application”, 13th to 15th March 2023 organized by Department of Computer Applications, CMR Institute of Technology, Bengaluru.

3. Delivered key note address "Keynote Address in National Conference on "NLP and Computation" (NCNLPC'22) - AI and NLP" on 22/04/2022, at Dhanalakshmi Srinivasan College of Arts and Science for Women(Autonomous), Perambalur
4. "Tools for Research" Three days International webinar on "Research Methodology " 23/02/2022 Dr. Umayal Ramanathan College for Women
5. Delivered key note address "Tools for Research Methods" in International Webinar on Research Methodology at Department of Information Technology, Dr. Umayal Ramanathan College for Women, Karaikudi on 22nd February 2022
6. Delivered lecture on "ML Tools and Techniques" in A National Level Virtual Seminar on "Prospective Areas in Computational Intelligence" at PSG Arts and science College, Coimbatore, on 17th March 2021
7. Resource person for "AICTE-ATAL- Faculty Development Programme on Human Centre Computing" and for hands-on session in "Conversational UI using Chatbot for Business function ", on 5th Feb 2021
8. "Machine Learning – Hands on" Webinar conducted by Dhanalakshmi Srinivasan Arts and science college, , on 15th June 2021.
9. "Python Programming" in Sri Bhagawan Mahaveer Jain First grade college in KGF, Karnataka on 3rd June 2021.
10. Delivered lecture and hands-on session in "Conversational UI using Chatbot for Business function ", in STTP "Artificial Intelligence based User Experience(UX) and User Interface(UI) Product organized by COE - Human Computer Interaction, Department of MCA. CMRIT
11. Delivered lecture and hands-on session for the Machine Learning - Faculty Development programme (FDP) from 30th April 2020 to 06th May 2020. This FDP was organized by Cambridge Institute of Technology, Dept of MCA, and conducted through Online Zoom Platform. Hands-on session was carried out through Google Colab-Google's Cloud Server.
12. Delivered Lecture on "Data Analytics using Python" in "A Five-Day National Webinar Series on Modern Trends in Information Technology – 2020", on 3rd June 2020 conducted by Department of Information Technology, JJ College of Arts and Science (Autonomous), Pudukkottai, Affiliated to Bharathidasan University.
13. Delivered Lecture on "Data Analytics with Python" to the faculty members of Department of MBA, CMR Institute of Technology, Bangalore on 3rd July 2020.

Participated in National Faculty Development Program/Workshop/Seminar

1. Strategic Decision making for Leaders through AI and Analytics, organised Indian Institute of Management, Ahmedabad from 10th Jan to 15/01/2024.
2. ATAL six days FDP on Lean Six Sigma for Higher Education Institution, organised by AICTE and Christ University from 11th Dec to 17th Dec 2023
3. 8 Day National level Online Faculty Development Program on Research Methodology using ChatGPT & AI tools and Funding Opportunities for Research, IQAC and Lincoln University College Marian Research Centre, The Kerala State Higher Education Council, November 2023

4. National Level Faculty Development Program (FDP) on Cloud Infrastructure (AWS) AICTE with BrainoVision National, Organiser & Presenter September 2023
5. 5 days workshop on Econometrics using R and Python at National Institute of Technology June 2023
6. Six day Faculty Development Program on Innovative Teaching and Learning Methods Christ University 19/06/2023 to 23rd June 2023
7. NPTEL-AICTE Faculty Development Program on **“Practical Machine Learning with TensorFlow”**, Aug to Dec 2019.
8. Faculty Development Program on **“Significance of Intellectual Property Rights(IPR) and Innovations with special focus on Prior Art Search for Engineering”**, Organized by CMRIT-KSCST IP Cell, 24th and 25th Oct 2019.
9. Workshop on **“Image Processing Algorithms for project implementation-MATLAB Open source perspective”**, 20-21 September 2019.
10. Workshop on Indian Design Patent Law and Drafting at CMRIT during 30th Aug 2019..
11. NPTEL-AICTE Faculty Development Program on **“Machine Learning for Engineering and Science Applications”**, Jan to Apr 2019.
12. AICTE/ISTE sponsored Faculty Development program on **“Machine Learning Techniques for Next Generation Smart Systems”**, Sri Krishna College of Tech, Coimbatore from 18th to 23rd June 2018.

Dr. Helen Josephine V L