



Dr. NISHA VARGHESE
Assistant Professor

PROFILE

Knowledgeable Lecturer and Researcher with 8+ years of university experience in teaching at postgraduate levels.

ACADEMIC

2019-2021	Ph.D. Computer Science (FT)	Bharathiar University
2018-2019	M.Phil. Computer Science (FT)	Bharathiar University
2005-2007	M.Sc. Computer Science	University of Calicut
2002-2005	B.Sc. Mathematics	University of Calicut
2000-2002	Plus Two Science	G.G.H.S.S, Paravur
1999-2000	SSLC	G.V.H.S.S, Kaitharam

CAREER

2022-	Assistant Professor	Bangalore
2015-2018	Assistant Professor on Contract	University of Calicut
2009-2010	Lecturer on Contract	Cochin University
2008-2009	Guest Lecturer	University of Calicut

EXPERIENCE : 11 Years (Teaching: 7 & Research: 4)

PUBLICATIONS : 15

Journals : 8

International : Scopus/ UGC/SCI /IEEE/Springer : 5
: International Conference papers : 1
: Other indexing : 2

Book Published : 1 (**Ethical Hacking**)

Book Chapters : 3

Conference Proceedings : 3

CERTIFICATIONS : 45 (Python, Data Science, Text Mining, Machine Learning and others)

CONFERENCES/ SEMINARS PRESENTED : 10

WORKSHOPS & FDP/ WEBINARS : 31

KEYNOTE DELIVERED : 7

AWARDS : 3

PATENT : 1

ACADEMIC PROJECT : Air Cargo Management System

M.Phil. THESIS : Privacy Preserving in Data Mining Using Bi-Party Data Releasing Method

Ph.D. TOPIC : Design and Development of Neural Machine Reading Comprehension Using Deep Learning Transformer models

CONTACT

PERMANENT ADDRESS

Kannanaikal House,
Poothole Road,
Thrissur-680004

COMMUNICATION ADDRESS

Akul Developers, Flat - A 310
Gunjur, Bangalore - 35

Ph: 9497796443, 6238526763

E-mail:

drnishatvarghese@gmail.com

Linkedin-

linkedin.com/in/nisha-
varghese-b41a2921b

PROFESSIONAL

I have a great mission to enlighten the minds of students through teaching and learning and to develop, update and share my knowledge and skills in computer science and interrelated fields.

Supervised various projects for MCA and M.Sc. Computer Science, Cyber Security and Data Analytics Students.

Understanding of different teaching strategies and techniques and how to implement and incorporate modern technology in the classroom.

AREAS OF INTEREST

Data Analytics, Text Mining
Natural Language Processing,
Machine Learning and Cyber Security

REFERENCE

Prof. Dr. M. Punithavalli, Ph.D.,
Bharathiar University
Ph: 9843281552 (Ph.D. Supervisor)

Prof. Dr. T. Devi, Ph.D., (U.K.)
HoD (Computer Applications)
Bharathiar University.
Ph: 9790004351

ORCID ID	Scopus ID	Google Scholar ID	Vidwan ID	Researcher ID
0000-0003-9644	57212476297	vGJxAzEAAAAJ	214250	rid21066

PUBLICATIONS

RESEARCH ARTICLES

1. Nisha Varghese, K Noel Binny, 2018, *Privacy Preserving in Data Mining using Bi-party Data Releasing Method*, International Journal of Advanced Research in Computer and Communication Engineering, 7(10), pp.72-79, ISSN: 2319-5940.
2. Nisha Varghese, M Punithavalli, 2019, *Lexical and Semantic Analysis of Sacred Texts using Machine Learning and Natural Language Processing*, International Journal of Scientific & Technology Research, 8(12), pp. 3133-3140, ISSN: 2277-8616. (**SCOPUS**)
3. Nisha Varghese, M Punithavalli, 2019, *Word Vector Representations: Sparse Versus Dense Vectors*, Working Papers on Linguistics and Literature, 8(1), pp. 360-367. ISSN: 2349 – 8420. (**UGC CARE Listed**)
4. Nisha Varghese, M. Punithavalli, 2019, *Machine Learning Techniques for Analyzing the Quality of Blood Cells due to Smoking*, International Conference on Computational Sciences. (Alagappa University)
5. Nisha Varghese, M. Punithavalli, 2020, *Machine Learning Techniques for the Classification of Blood Cells and Prediction of Diseases*, International Journal of Computer Science Engineering, 9(1), pp. 66-75, ISSN: 2319-7323.
6. Nisha Varghese, M. Punithavalli, 2020, *Semantic Similarity Analysis on Knowledge Based and Prediction Based Models*, International Journal of Innovative Technology and Exploring Engineering (**Scopus**), 9(6), pp. 477-481, ISSN: 2278-3075, DOI:10.35940/ijitee.F3783.049620
7. Nisha Varghese, M. Punithavalli, 2021, *Neural Machine Reading Comprehension on COVID Dataset using Bi-directional Encoder Representations from Transformers*, IEEE Xplore, International Conference on Inventive Research in Computing Applications, pp. 1600 - 1605, ISBN: 978-0-7381-4626-3, DOI: 10.1109/ICIRCA51532.2021.9544727. (**IEEE Xplore**)
8. Nisha Varghese, M. Punithavalli, 2022, *A Comprehensive Survey on Machine Reading Comprehension: Models, Benchmarked Datasets, Evaluation Metrics and Trends*, Congress on Intelligent Systems, ISSN: 2367-4512, pp. 1-15. (**Springer**)
9. Nisha Varghese, Shafi Shareef, *Impact of Game Addiction to Emotional, Physical Distress and Academic Performance on College Students: Prediction using Machine Learning and Ensemble Algorithms*, Indian Journal of Natural Sciences, 14(77), 2023, ISSN: 0976-0997, pp. 55068-55075. (**Web of Science**)

BOOK

1. M. Punithavalli, Nisha Varghese, *Ethical Hacking*, Charulatha Publications, ISBN:13:978-93-91405-64-9.

BOOK CHAPTERS

1. Nisha Varghese, M. Punithavalli, 2022, *Semantic Similarity Extraction on Corpora using Natural Language Processing Techniques and Text Analytics Algorithms*, Algorithms for intelligent Systems, ISSN: 2524-7565, DOI: 10.1007/978-981-16-6332-1_16 (**Springer-Scopus/WoS**)

2. Nisha Varghese, *Human-Computer Interaction: Interfaces and Challenges*, Article-135, The leaves of Knowledge, ISBN-978-93-91689-49-0.
3. Nisha Varghese, *Transition from Industry 4.0 – 5.0*, Article-142, The leaves of Knowledge, ISBN-978-93-91689-49-0.

CONFERENCE PROCEEDINGS

1. Nisha Varghese, M. Punithavalli, 2019, *Machine Learning Techniques for Analyzing the Quality of Blood Cells due to Smoking*, International Conference on Computational Sciences. (Alagappa University)
2. Nisha Varghese, Prasanna N, Vinod Mohan, *Sentiment Analysis on Hotel Reviews, KrupaDecon 2022*, International Conference on Challenges and Strategies to Revolutionize Global Business Standards, ISBN: 978-81-9500227-6-2, Bangalore.
3. Vivek R, Darshan B, Nisha Varghese, *SMS SPAM Classifier, KrupaDecon 2022*, International Conference on Challenges and Strategies to Revolutionize Global Business Standards, ISBN: 978-81-9500227-6-2, Bangalore.

PATENT

1. Nisha Varghese, Detects Normal or abnormal investigations in Digital MR Brain Pictures using a Computer-Aided Medical Diagnostic Tool. (**Patent Application Number-202341004192**)

CURRENTLY ACCEPTED

1. Nisha Varghese, M. Punithavalli, 2022, *An Efficient Context Minimization Method for Machine Reading comprehension Span Extraction Tasks*, Soft Computing, (**Springer-SCIE-Accepted**)
2. Nisha Varghese, M. Punithavalli, 2021, *Question Answering Vs Machine Reading Comprehension: Neural Machine Reading Comprehension using Transformer Models*, Natural Language Processing and Information Retrieval: Principles and Application. (**CRC Press, Taylor and Francis Group-Accepted**)
3. Nisha Varghese, Vivek R, *Efficiency of Machine Learning and Ensemble Models on Network Intrusion Detection using KDDCup 99 Dataset. (IEEE)*
4. Nisha Varghese, Shafi Shareef, *Smart Security Surveillance System for Agriculture and Livestock Monitoring using the Internet of Things and Computer Vision. (Springer)*

CERTIFICATIONS

PLATFORM	COURSE
UDEMY	Modern Natural Language Processing in Python
	First Steps in to NLP: Starter Guide
	Neural Networks using Keras and Tensor Flow in Python
	Deep Learning with Keras and Tensor Flow in Python and R
	Support Vector Machines in Python – SVM in Python
	Complete Python Programming 2020: Beginner to Advanced
IBM	Python 101 for Data Science
	Data Analysis with Python
	Data visualization with python
	Introduction to Machine Learning with Sound

	Digital Analysis and Regression
	Machine Learning with Python
	Data Science Methodology
	Deep Learning Fundamentals
	Introduction to Data Science
COURSERA Python for Everybody University of Michigan	Programming for Everybody
	Python Data Structures
	Using Python to access web data
	Using databases with Python
	Retrieving, processing and Visualizing Data with Python
COURSERA Python 3 Programming University of Michigan	Python Basics
	Python Functions, Files and Dictionaries
	Data Collection and Processing with Python
	Python Classes and Inheritance
COURSERA University of Illinois	Text Mining and Analytics
	Text Retrieval and Search Engines
Other Courses	(Yale University-2, Korea AIST -1, Georgia Institute of Technology - 4, University of North Carolina -1)

PROJECTS

PLATFORM	PROJECTS
COURSERA	Building Smart Business Assistants with IBM Watson
	Create Your First Chatbot with Rasa and Python
	Python – 3 Projects & C++ Application
IBM	Bulid Your Own Chatbot

SEMINARS

1. Applying Modern Deep Learning Techniques to Natural Language Processing, Dr. NGP Institute of Technology, Coimbatore, 19/12/2019.
2. International Seminar on Research in Computers: Why, What and How? Industry 4.0, 03/03/2020, Department of Computer Applications, Bharathiar University, Coimbatore.

CONFERENCES

1. First National Conference on Computational Intelligence and Data Analytics (CIDA 2019), University of Calicut, Kerala, 26/02/2019-27/02/2019.
2. International Conference on Computational Sciences (ICCS-2019), Alagappa University, Tamilnadu, 23/10/2019 – 24/10/2019.
3. 10th National Conference on Machine Learning and smart technology (NCMLST-2020), Sri Krishna College of Engineering and Technology, Coimbatore, 12/02/2020.
4. International Conference on Sustainable Advanced Computing (ICSAC), Christ University, Bangalore,05/03/2021 – 06/03/2021.
5. International Conference on Artificial Intelligence: Advances and Applications, Jaipur and Rajasthan Technical University, Rajasthan, 27/03/2021 -28/03/2021.
6. First Conference on Deployable AI, IIT Madras,16/06/2021 -18/06/2021
7. International Conference on Challenges and Strategies Revolutionize Global Business Standards, Krupanidhi Degree College, Bangalore, 03/06/2022- 04/06/2022. (Judge)

8. ICRACSIT 2K23: International Conference on Recent Advances in Computer Sciences and Information Technology, St. Francis De Sales College, Bangalore, 10/03/2023.
9. IEEE International Conference on Contemporary Computing and Communications (InC4), April 21-22, 2023, CHRIST (Deemed to be University), School of Engineering and Technology, Kengeri Campus, Bangalore, India.
10. Fourth International Conference on Internet of Things, 26-28 April 2023, SRM Institute of Technology, Kattankulathur, Chennai, India.

FACULTY DEVELOPMENT PROGRAMS

1. Computer Vision and Deep Learning: A Research Perspective, PSG College of Technology, Coimbatore, 26/08/2019 – 01/09/2019.
2. Text and Image Mining, Vellore Institute of Technology, Chennai, February -2020.
3. Exploring Machine Learning Algorithms and Applications, Kongu Engineering College, Erode, 21/05/2020 – 23/05/2020.
4. Neural Networks and Deep Learning using Python, REVA University, Bangalore, 1/6/2020 - 5/6/2020.
5. Moodle Learning Management System, Govt. Arts College, Salem, 02/06/2020 – 06/06/2020.
6. Scientific Communication for Research Paper and Proposal writing, PSG, Coimbatore, 01/07/2020 – 03/07/2020.
7. NLP and Related Technologies, NMAM Institute of Technology, Karnataka, 09/07/2020 – 11/07/2020.
8. Applications of Mathematics in Science and Technology, Narasu's Sarathy Institute of Technology, Salem, 21/06/2021-26/06/2021.
9. Research Methodologies - Application of Statistical Tools for Decision Making, Marudhar Kesari Jain College for Women, Vaniyambadi, 12.07.2021.
10. Applications of Machine Learning, Shri Vishnu Engineering College for Women, Bhimavaram, 15/06/2021 – 19/06/2021.
11. Five Day International Virtual Faculty Development Program, Dr. MGR Educational and Research Institute, (Deemed to be University), Chennai, 20/06/2022 – 24/06/2022.
12. Research Applications in Artificial Intelligence and Machine Learning, NITTE, Dr. N.S.A.M First Grade College, Bangalore University, 20/02/2023 -24/02/2023.

WORKSHOPS

1. Python Machine Learning, Velammal College, Chennai, 20/07/2019.
2. Practical Introduction to MATLAB for Scientific Computing & Engineering, Kongu Engineering College, Erode, 03/08/2019.
3. Deep Learning Using Python, Sri Ramakrishna Engineering College, Coimbatore, 14/10/2019 – 15/10/2019.
4. Journal Writing, IPR and Patent Drafting, Karpagam College of Engineering, Coimbatore, 13/12/2019.
5. Machine Learning, Madras Institute of Technology, Chennai, 04/01/2020.
6. Natural Language Processing using SpaCy, Kongu Engineering College, Erode, 14/02/2020.
7. International Online Workshop on “Cyber Attacks and Handling Methods”, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, 30/09/2020.
8. International Online Workshop on “Is Block Chain and AI – Solution for Cyber Security?”, Kyungpook National University, South Korea, 01/10/2020.
9. Training on Academic and Technical Writing, RUSA, Bharathiar university, Coimbatore, 15/06/2020 – 01/07/2020.
10. World Resources Webinar Industry 4.0 Training, Taylors University, 10/4/2022.

WEBINARS

1. Research Challenges in Data Mining, Chennai Institute of Technology, 06/05/2020.
2. Tips for Effective Research in Computer Science from a Beginners Perspective, MES College, Nedumkandam, 26/05/2020.
3. Recent Trends in Cloud Computing, SAFI Institute of Advanced Study, Calicut, 29/05/2020.
4. Data Visualization Using Tableau, N.B.K.R. Institute of Science & Technology, Nellore, 05/06/2020.
5. Cyber Warfare and Safe Mobile Usage, Angappa College of Arts and Science, Coimbatore, 16/06/2020.
6. Introduction to Deep Learning, Avinashilingam Institute for Home Science and Higher Education, Coimbatore, 17/06/2020.
7. Big Data Hadoop Framework, Avinashilingam Institute for Home Science and Higher Education, Coimbatore, 25/06/2020.
8. The Road ahead: Learning's from Cyber Security in 2020 and Beyond, Angappa College of Arts and Science, Coimbatore, 29/07/2020.
9. Recent Trends in Software Architecture and Digital Twin, SRM Valliammai Engineering College, Chennai, 19/09/2020.
10. Truecaller Search Optimization using Trie, Tech Learn, 3/3/2022.
11. Text Mining and Text Analytics, NITTE, Dr. N.S.A.M First Grade College, Bangalore University, 2022.

SEMINARS/WEBINARS/WORKSHOPS/ FDP GUEST LECTURES DELIVERED

1. 20 days Webinar on Cyber Security, Department of Computer Applications, 2021, Bharathiar University, Coimbatore, 11/08/2021-02/08/2021.
2. Workshop on Natural Language Processing, Nehru Arts and Science College, Coimbatore, 27/11/2021.
3. Human – Computer Interaction, 29/05/2022, Sree Kumarswami Mahavidyalaya, Ausa, Maharashtra. (Asia Book of Records, India Book of Records, International Book of Records)
4. Transition from Industry 4.0 – 5.0, 29/06/2022, Sree Kumarswami Mahavidyalaya, Ausa, Maharashtra. (Asia Book of Records, India Book of Records, International Book of Records)
5. Role of Machine Learning in Cyber Security: Research Perspective, Five Days FDP Frontiers of Cyber Security Research in recent era, Academic Staff College and School of Computer Science and Engineering, 22/08/2022-26/08/2022, Vellore Institute of Technology (VIT-Deemed University), Vellore, Tamilnadu.
6. Network intrusion and malware detection using machine learning, Three days of National Level Workshop on Deep Learning Models for Cyber Attack Detection, 28/11/2022-30/11/2022, Department of Computer Science and Engineering, Dayanand Sagar College of Engineering, Bangalore.

AWARDS/ACHIEVEMENTS

1. Edu-Excellence Award May 2022, EDVISION.
2. IPR Award for published book '*Ethical Hacking*', Intellectual Property Rights Cell, Bharathiar University, Coimbatore, NL-11782/2022.
3. Best Paper Award, '*Smart Security Surveillance System for Agriculture and Livestock Monitoring using the Internet of Things and Computer Vision*', Fourth International Conference on Internet of Things, 26-28 April 2023, SRM Institute of Technology, Kattankulathur, Chennai, India.

4. Reviewer of the International Journal of Research and Scientific Innovation.
5. Reviewer of 2023 IEEE International Conference on Contemporary Computing and Communications, Christ University, Bangalore.
6. Reviewer of International Conference on Power Engineering and Intelligent Systems, National Institute of Technology Delhi, India.
7. Reviewer of the 4th International Conference on Data Science and Applications (ICDSA 2023), Malaviya National Institute of Technology Jaipur, India.

DECLARATION

I hereby declare that the details mentioned above in my resume are correct in my knowledge and belief. I will be responsible for any mistakes in the content that may occur in the future.

Place: Bangalore

Date: 12/06/2023



NISHA VARGHESE