CURRICULUM VITAE



Name: Dr. P. Vijaya E-mail : Vijaya.Padamanabha@mcbs.edu.om

Education and Qualifications:

- Ph.D in Computer Science & Engineering, Karpagam University, Coimbatore, Tamilnadu India, 2017.
- Master of Technology (M.Tech) (Computer Science & Engineering), Manipal Institute of Technology, Manipal, India, 2002.
- Bachelor of Engineering in Electronics & Communication (B.E. Electronics & Communication), National Institute of Technology, Tiruchirappalli, India, 1995.
- Diploma in Electronics & Communication, PNRM Polytechnic, Tiruchirappalli, India, 1987.

Professional Profile: Having more than 24 years of Teaching Experience

- 1. Assistant Professor, Department of Mathematics and Computer Science, Modern College of Business and Science, Sultanate of Oman, from 26/1/2020 to till date
- 2. Assistant Professor, Department of Computer Science & Engineering, Birla Institute of Technology, Muscat, Sultanate of Oman, From 2/10/2004 to 25/1/2020
- 3. Sr. Lecturer, Department of Computer Science & Engineering, P.A College of Engineering, Mangalore, India, Sept 2002 to Sep 2004.
- 4. Lecturer, Department of Electronics, Dr. T.M.A. Polytechnic, Manipal, India, July 1998 to August 2002.
- 5. Lecturer, Department of Electronics, Government Polytechnic, Mangalore, India, Sept. 1997 to June 1998.
- 6. Lecturer, Department of Electronics, PNRM Polytechnic, Tiruchirappalli, India, Sept 1995 to August 1997.
- 7. Apprenticeship training in BHEL, Tiruchirappalli, India.
- 8. Customer Support Engineer, Vi MicroSystems Pvt Ltd, Chennai from 1988 to 1990

Key Responsibilities:

- 1. Member of Teaching, Learning Development and Resource Committee since 2022.
- 2. Member of Academic Advising Committee for the academic year 2023-24.
- 3. Chairperson, Research Committee, Department of Mathematics and Computer Science for the academic year 2021-22.
- 4. Member, Standard 2 team for ISA re-accreditation.
- 5. Actively involved in Curriculum Development of Bachelor of Science in Applied Technologies and Bachelor of Science in Game Development and Animation
- 6. Member of Academic Advising and Student Support Committee for the academic year 2021-22.
- 7. Program Coordinator, Bachelor of Science in Computer Science since 2020.
- 8. Coordinator, Computing Club since 2020.
- 9. Member, Industry Academy Board, Muscat College.
- 10. Member, Industry Academy Board, Middle East College.
- 11. Head, Academic Coordination & Academic Support Services from June 2017 to till date.
- 12. Head, Department of Computer Science & Engineering from Nov. 2008 to May 2017.
- 13. Head, Department of Computer Science & Engineering from Jan. 2019 to till date.
- 14. Member Secretary, Academic Monitoring Committee.
- 15. Chairperson, Library Advisory Committee.
- 16. Member Secretary, Teaching & Learning Committee.
- 17. Member, Quality Assurance Steering Committee.
- 18. Chairperson, Marketing Committee.
- 19. Chairperson for Standard 6- Academic Support Services-WCAS Self Assessment Portfolio.
- 20. Co-Chairperson for Standard 2 Student Learning by Coursework Programs WCAS Self Assessment Portfolio.
- 21. Chairperson, Website Monitoring Committee.
- 22. Chairperson, Library Advisory Board.
- 23. Chairperson: Project Monitoring Committee.
- 24. Member, Library Purchasing Committee.
- 25. Member, Enews Letter.
- 26. Member, Media and Publication Committee.
- 27. Member, Program Advisory Board- Multimedia Technology-Middle East College.
- 28. Member, Program Advisory Board- Hardware and Networking Specialization- Middle East College.
- 29. Member, Program Advisory Board- M.Sc(IT) Middle East College.

Achievements:

- 1. Organized Innovators Robotic League 2K23 on November 15th, 2023.
- 2. Organized MCBS-Inter Collegiate Programming Contest 2023 on May 1st 2023.
- 3. Best Women HOD of the year award in International Inspirational Women Awards, 2020 on 18th January 2020.
- Prestigious Prof. Indra Parekh Women Education Leader Award in World Education Congress, July 4th, 2019.
- 5. Best Professor in Engineering Studies in Asian Education Leadership Awards, Dubai,

October 10th, 2019.

- 6. Guest Editor Special Issues on Nature inspired algorithms for cluster computing– Journal of Cluster Computing Springer.
- 7. Guest Editor Special Issues on Parallel Computing Methodologies for E-Medicine-International Journal of Bioinformatics Research and Applications – Inderscience.
- 8. Guest Editor Special Issue Intelligence in Application of Bio and Nano Material-International Journal of Nano and Biomaterials-Inderscience.
- 9. Guest Editor Special Issues on Recent trends and developments in Artificial Intelligence and its Applications International Journal of Artificial Life Research.
- 10. Guest Editor Special Issues on Fusion of Intelligent Computing with Hadoop Technology in Big Data Analytics International Journal of Operations Research and Information Systems.
- 11. Guided two PhD scholar.
- 12. Editor Conference Proceedings of Computational Sciences and Sustainable Technologies, 2023
- 13. External Reviewer PhD Thesis Pune University, India
- 14. External Reviewer PhD Thesis Vels Institute of Science, Technology & Applied Studies.
- 15. External Reviewer PhD Thesis Sri Siddhartha Institute of Technology
- 16. Program Reviewer for the Ne program-MOHERI
- 17. External Reviewer in the faculty promotion process, Liwa College.
- 18. Advisory Board Member -ISCComm-2023
- 19. Program Committee Member AISD 2023
- 20. Secretary ICCSST 2022
- 21. Program Committee Member ICIITB 2022
- 22. Program Committee Member ICIITB 2023
- 23. Best HOD –Academic Departments 2016-17. This was started first time in Waljat College.
- 24. Organised Data Science using R Programming for WCAS Engineering Faculty members from 30/1/18 to 1/2/18.
- 25. Organized special session on Advance Technologies on Information Collection, Extraction and Transmission in the International Conference on Infocom Technologies and Unmanned Systems (ICTUS 2017), Amity University Dubai on 18th to 20th, December 2017.
- 26. Organized student exchange Program to Khawarizmi International College, UAE from 15th to 19 th of October, 2017.
- 27. Organized one month summer program from July 30th to August 24th 2017. It was well appreciated by all.
- 28. Organized the first IT fest Revera 2017 on May 10th by inviting school students and students of HEI's in Oman. More than 200 students participated and won prizes different categories.
- 29. Organized special session on Advance Technologies on Information Collection, Extraction and Transmission in the International Conference on Infocom Technologies and Unmanned Systems (ICTUS 2017), Amity University Dubai on 18th to 20th, December 2017.
- 30. Convener for the First National Symposium on Emerging Trends in Engineering and Management, Waljat College of Applied Sciences, Nov 13-14, 2017.

- 31. Programme Committee Member, 7th International Conference On Reliability, Infocom Technologies And Optimization 2018, Amity University, Noida.
- 32. Programme Committee Member, International Conference on Emerging Technologies in Computing 2018, London Metropolitan University, London, UK.
- 33. Programme Committee Member, International Conference on Computing, Electronics & Communications Engineering 2018, University of Essex, Southend, UK.
- 34. Programme Committee Member, International Conference on Computing, Electronics & Communications Engineering 2019 (IEEE iCCECE '19), London Metropolitan University, UK.
- 35. Programme Committee Member, International Conference on Emerging Technologies in Computing 2010, London Metropolitan University, London, UK.

Papers published/ presented:

- 1. P. Vijaya, Satish Chander, Roshan Fernandes, Anisha P. Rodrigues, R. Maheswari, "Severity of Lung Infection Identification and Classification using Optimization-enabled deep learning with IoT", in Multimedia Systems, Volume 30, Issue 2, pp 1-23, April 2024.
- Anisha P Rodrigues, Roshan Fernandes, P. Vijaya, Maryam Al Washahi, Hothefa Shaker,"Predictive Analytics Techniques in the Agricultural Industry: A Case Study", in IEEE xplorer, 2024 11th International Conference on Reliability, Infocom Technologies and Optimization, May 14th, 2024.
- P. Saranya, P. Vijaya, R. Maheswari, Praba Palanisamy, Joseph Mani, "Intelligent System for Improving Scalability by Sharding for Agriculture Supply Chain", in IEEE xplorer, 2024 11th International Conference on Reliability, Infocom Technologies and Optimization, May 14th, 2024.
- 4. Anisha P Rodrigues, P. Vijaya, Roshan Fernandes, "Tulu Language Text Recognition Translation" in IEEE Access, January 2024.
- Vijaya, P., "Adaptive Jellyfish Search Optimization Trained Deep Learning for Breast Cancer Classification Using Histopathological Images" in *Mapana Journal of Sciences*, Volume22, Issue 3, pp.59-79, December 2023.
- 6. Kajol Rana, Ajay Vikram Singh, P. Vijaya,"AggTrust: New Approach for Aggregated Trust Value for IoT with Comparative Study, in IEEE xplorer, 2023 6th International Conference on Contemporary Computing and Informatices(IC3I), Volume 6, pp 694-699, September 2023.
- P. Vijaya, Rajeev Rajendran, Basant Kumar, Joseph Mani, "Early Prediction of at Risk Students in Higher Education Institutions using Adaptive Dwarf Mongoose Optimization Enabled Deep Learning", in conference proceedings of International Conference on Computational Science and Sustainable Technologies, May 08-09, 2023
- 8. Satish Chander, P. Vijaya, Roshan Fernandes, Anisha Rodrigues, Maheswari, "Dolphin-Political Optimized Tversky Index Based Feature Selection in Spark Architecture for Clustering Big Data", in Advances in Engineering Software, Volume 176, February 2023(Web of Science)
- 9. Nikhil Kamath B, Roshan Fernandes, P. Vijaya..,"TAKEN: A traffic Knowledge-Based

Navigation System for Connected and Autonomous Vehicles", in Sensors, , Volume 23, Issue 2, January 2023(Web of Science)

- 10. P. Vijaya, Satish Chander, Prabha Palanisamy, Alycia Sebastian, Joseph Mani, "Feature Selection and Optimization Based Deep Learning for Rainfall Prediction", conference proceedings of 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022) in Lecture Series: Advances in Computer Science Research, January 2023, Atlantis Press, Springer.
- 11. Alycia Sebastian, P. Vijaya, Joseph Mani, "Biometrically Authenticated Boot Loading System from USB Drive by Exploiting the Fingerprint and Finger Vein", conference proceedings of 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022) in Lecture Series: Advances in Computer Science Research, January 2023, Atlantis Press, Springer.
- 12. K.R. Resmi, G. Raju, P. Vijaya, Joseph Mani, "Person Identification by Models Trained Using Left and Right Ear Images Independently", conference proceedings of 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022) in Lecture Series: Advances in Computer Science Research, January 2023, Atlantis Press, Springer.
- 13. Anisha, Roshan, P. Vijaya, "A Study on the Evaluation of Different Regressors in Weather Prediction:", in IEEE International Conference in Artificial Intelligence and Data Engineering(AIDE 2022), organized by NMAMIT, Nitte, Karkala, 22-23 December, 2022.
- 14. Bhuvana Shetty, Roshan, P. Vijaya,"Brain Tumor Detection using Machine Learning and Convolutional Neural Network, IEEE International Conference in Artificial Intelligence and Data Engineering(AIDE 2022), organized by NMAMIT, Nitte, Karkala, 22-23 December, 2022.
- 15. P. Vijaya, M. Selvi, "An Approach using E-Khool User Log Data for E-Learning Recommendation System", in Journal of Information and Knowledge Management, Volume 21, 3, September 2022(Web of Science)
- 16. Satish Chander, P. Vijaya, Praveen Dhyani, "A parallel Fractional Lion Algorithm for Data Clustering Based on MapReduce Cluster Framework", in International Journal on Semantic Web and Information systems, Volume 18, No. 1, July 2022(Web of Science)
- 17. Anisha Rodrigues, Roshan Fernandes, P. Vijaya, Satish Chander, "Performance Study on Indexing and Accessing of Small File in Hadoop Distributed File System", in Journal of Information and Knowledge Management, Volume 20, No. 4, Nov 2021(Web of Science)
- P. Vijaya, Satish Chander, S.L. Gupta, "Academic Students' Performance Prediction Model: An Oman Case Study", in *International Journal of Information and Decision Sciences*, Volume 13,No2, pp 166-191, July 2021.(Scopus)
- 19. Raqiya Ahmed Al Hilali, P. Vijaya, "An Exploratory Study of the Key Enabling Factors of IT Projects Governance(ITPG), Volume 10, No 1, May 2021.(Scopus)
- Satish Chander, P. Vijaya, "Tunicate swarm-based black hole entropic fuzzy clustering for data clustering using COVID data", IEEE Xplore, 2020 IEEE 17th India Council International Conference (INDICON), Delhi, December 10-13, 2020.(Scopus)
- 21. Satish Chander, P. Vijaya, Joseph Mani, "Jaya Spider Monkey Optimization-Driven Deep Convolutional LSTM for the Prediction of COVID'19", in *Bio-Algorithms and Med-Systems*", Volume 16, No 4, Nov 2020. (Scopus)
- 22. P. Vijaya, Satish Chander, G.Raju, "LENN: Laplacian probability based Extended Nearest Neighbor Classification Algorithm for Web Page Retrieval", Proceedings IconDSC;IEEE Conference 2019 International Conference on Data Science and Communication, CHRIST (Deemed to be University), Bangalore, (INDIA), 01 02March, 2019.(Scopus)
- 23. P. Vijaya, Satish Chander, "Lionrank: Lion Algorithm-Based Metasearch Engines For Re-Ranking Of Webpages" in *Journal of SCIENCE CHINA Information Sciences, Springer*,

Volume 61, No 12, pp102-122, December 2018.(Web of Science)

- 24. Kajol Rana, Ajay Vikram Singh, P. Vijaya," A Systematic Review on Different Security Framework For IoT", IEEE sponsored Fifth International Symposium on Innovation in Information and Communication Technology (ISIICT), Philadelphia University, Amman, Jordan, October 31 - November 01, 2018.(Scopus)
- 25. Satish Chander, P. Vijaya, Praveen Dhyani, "MO-ADDOFL: Multi-objective-based adaptive dynamic directive operative fractional lion algorithm for data clustering", IEEE Co-sponsored International Conference on Promoting Entrepreneurship & Technological Skills: National Needs, Global Trends MIC2018, Majan University College, 19-20, March, 2018.(Scopus)
- Satish Chander, P. Vijaya, Praveen Dhyani, "Multi Kernel and Dynamic Fractional Line Optimization Algorithm for Data Clustering", in *Alexandria Engineering Journal* (*Elsevier*), Volume 57, No 1, pp, 267-276, March 2018.(Web of Science)
- Satish Chander, P. Vijaya, Praveen Dhyani, "A Multi-Constraint based Objective Function and Lion Optimization for the Data Clustering", Proceedings of IEEE Co-sponsored *International Conference on Infocom Technologies and Unmanned Systems-ICTUS-2017*, pp:598-604, Amity -Dubai, 18-20, December, 2017.(Scopus)
- Satish Chander, P. Vijaya, Praveen Dhyani "MO- ADDOFL: Multi-Objective-based Adaptive Dynamic Directive Operative Fractional Lion Algorithm for Data Clustering", Proceedings of IEEE Co-sponsored International Conference on Infocom Technologies and Unmanned Systems-ICTUS-2017, pp: 605-611, Amity -Dubai, 18-20, December, 2017.(Scopus)
- 29. Satish Chander, P. Vijaya, Praveen Dhyani, "ADOFL: Multi Kernel Based Adoptive Directive Operative Fractional Line Optimization Algorithm for Data Clustering", in Journal of Intelligent Systems (Scopus), Vol 27, Issue 3, pp. 317-330, July 2018.(Scopus)
- 30. P. Vijaya, Satish Chander, G. Raju, "USQO-FOSS quality model: Utilization based Software Quality Observatory for evaluation of Free and Open Source Software", Proceeding of the FOSSC-Oman 2017, 3rd Edition, pp. 55-60, Sultan Qaboos University, Feb 14-15, 2017.
- 31. Meghna Sangtani, Shannon Michele D'Souza, Mriganka Harsh, Satish Chander, P. Vijaya, "Implementation Challenges involved in Big Analytics", in *International Journal of Engineering Sciences & Research Technology*, Volume 5, No 10, pp.834-840, 2016.
- 32. Satish Chander, P. Vijaya, Praveen Dhyani, "DOFL: Kernel Based Directive Operative Fractional Line Optimization Algorithm for Data Clustering", in *International Review of Computers & Software*, Vol 11, No 8, pp. 701-714, 2016(*Scopus*),
- Satish Chander, P. Vijaya, Praveen Dhyani, "Fractional Lion Algorithm An Optimization Algorithm for Data Clustering", in *Journal of Computer Science, Science Publications* (Scopus), Vol 12, No 7, pp. 323-340, 2016(Scopus)
- 34. Satish Chander, P. Vijaya, "MKF-Firefly:Hybridization of Firefly and Multiple Kernel-Based Fuzzy C-Means Algorithm", *International Journal of Advanced Research in Computer & Communication Engineering*, Vol 5, No 7, pp.213-216, 2016.
- 35. P. Vijaya, G. Raju, Santosh Kumar Ray, "Artificial Neural Network Based Merging Score for Meta Search Engines", in *Journal of Central South University (Springer)*, Volume 23, No 10, pp. 2604-2615, 2016.(Web of Science)
- 36. P. Vijaya & Satish Chander, "Fuzzy Integrated Extended Nearest Neighbour Classification Algorithm for Web Page Retrieval", Proceeding of the International Conclave on Innovations in Engineering & Management, pp. 43-49, Waljat College of Applied Sciences, Feb 24-25, 2016.
- P. Vijaya, G. Raju, Santosh Kumar Ray, "S-MSE: A Semantic Meta Search Engine Using Similarity and Reputation Measure", *Journal of Theoretical and Applied Information Technology (Scopus)*, Vol 60, No 2, 2014.(Scopus)

- 38. P. Vijaya, G. Raju, Santosh Kumar Ray, "An Ontology Based Meta-Search Engine for Effective Web Page Retrieval", *International Review of Computers & Software(Scopus)*, Vol 8, no. 2, pp. 533-541, 2013.(Scopus)
- 39. P. Vijaya & Siva Kumar, "Engineering Services Outsourcing: Challenges and Opportunities (with special reference to India)", Proceeding of the *International Conference on Service Industry; Challenges and Opportunities*, Waljat College of Applied Sciences, September 13-14, 2006.

Publication in the Proceeding of National Symposium.

- 1. Neha Sunil, Nikhil Sunil,Dr. P. Vijaya, "Google Assistant Supervised Smart Home", Proceeding of the *1st Student National Symposium IR 4.0*, Higher College of Technology, Al-Khuwair on June 18, 2019.
- 2. Basma Zubair, Dr. P. Vijaya, "Object Detection and Recognition for Smart Retail Checkout", Proceeding of the *1st Student National Symposium IR 4.0*, Higher College of Technology, Al-Khuwair on June 18, 2019.
- 3. Kevin Jacob Thomas, Dr. P. Vijaya, "Music Generation using Neural Networks", Proceeding of the *1st Student National Symposium IR 4.0*, Higher College of Technology, Al-Khuwair on June 18, 2019.
- 4. Neha Sunil, Nikhil Sunil,Dr. P. Vijaya, "IoT Based Home Automation System Using Google Assistant", Proceeding of the 9th National Symposium on Engineering Final Year Projects, Nizwa University, May 1, 2019.
- Basma Zubair, Dr. P. Vijaya, "Computer Vision Based Point-of-Sale System", Proceeding of the 9th National Symposium on Engineering Final Year Projects, Nizwa University, May 1, 2019.
- Kevin Jacob Thomas, Debashish Halder, Dr. P. Vijaya, "A Study on the Possibilities of Using Neural Networks for Music generation And Music Composition", Proceeding of the 9th National Symposium on Engineering Final Year Projects, Nizwa University, May 1, 2019.
- 7. Kranthi Kiran, Hozefa Saifee, Jokha Al Wahaibi, Shima Al Saghir Bakhit, P. Vijaya," Android Tour Guide", Proceeding of the 8th National Symposium on Engineering Final Year Projects, Nizwa University, May 2, 2018.
- 8. Urvashi Kishnani, Srinidhi Madabhushi, Gaurav T. Achrekar, Avinash Gopal, P. Vijaya, "Student Guidance and Utility Application", Proceeding of the 8th National Symposium on Engineering Final Year Projects, Nizwa University, May 2, 2018.
- Urvashi Kishnani, Srinidhi Madabhushi, P. Vijaya, "A Review: Blockchain Technology and its Application in Oil and Gas Industry of Oman", Proceeding of the National Symposium Bridging Education & Industry for Next Generation, Sohar University, May 1, 2018
- 10. Mriganka Harsh, Meghna Sangtani, Shannon Michelle D'Souza, P. Vijaya, "VisionCam", Proceeding of the 7th National Symposium on Engineering Final Year Projects, Nizwa University, May 3, 2017.
- 11. Athila Nechiyil, Avinash Ramkumar, Devika Prakash, Sujeendran Menon, P. Vijaya, "Virtual Cycle", Proceeding of the 6th National Symposium on Engineering Final Year Projects, Nizwa University, May 4, 2016.

- 12 Abeer Juma, Chandni Joshi, Nida Hafeez, Noura Salim, P. Vijaya, "Drones- Unmanned Aerial Vehicle", Proceeding of the 5th National Symposium on Engineering Final Year Projects, Nizwa University, May 5, 2015.
- 13. Nair Sreenath, Aaron Pinto, P. Vijaya, Dr. Santosh Kumar Ray, "Artificial Intelligence Receptionist", Proceeding of the 3rd National Symposium on Engineering Final Year Projects, Nizwa University, May 19, 2013.
- 14. Brian Babu Vemmali ,Saisaraswathy Menon, P. Vijaya, Santosh Kumar Ray, "Deep Trawl: Design a distributed Search Engine for Efficient Information Retrieval", Proceeding of the 2nd National Symposium on Engineering Final Year Projects, Nizwa University, May 15, 2012.

Book Published

- P. Vignesh, R. Maheswari, P. Vijaya, U. Vignesh, "Machine Learning for AeroSpace Object Categorization", Chapter 8, in AI and Blockchain Optimization Techniques in Aerospace Engineering, pp 164-180, March 2024, IGI Global.
- Parth Birthane, R. Maheswari, R. Ganesan, P. Vijaya, "Assistive image caption and tweet development using Deep Learning", Chapter 16, in Explainable Artificial Intelligence (XAI): Concepts, enabling tools, technologies and applications, pp. 309-327, November 2023, IET Digital Library
- Anish Samantaray, C. Saravanan, Meghana Bollam, R. Maheswari, P. Vijaya, "Comparison of artificial intelligence model for prognosis of breast cancer", Chapter 21, in Explainable Artificial Intelligence(XAI): Concepts, enabling tools, technologies and applications, pp. 429-425, November 2023, IET Digital Library
- Girish Kumar, Maheswari Raja, P. Vijaya," Machine learning in genomics: Identification and modeling of anticancer peptides", Chapter 3, in Data Science for Genomics, pp. 25-67, November 2022, Academic Press, Elesvier.
- Chaitanya Kumar, J. Andrew John, Maheswari Raja, P. Vijaya, "Genetic factor analysis for an early diagnosis of autism through machine learning", Chapter 4, in Data Science for Genomics, pp. 69-83, November 2022, Academic Press, Elesvier.
- Roshan Fernandes, Anisha.., Vijaya Padmanabha, "Intelligent IoT-Based Product Dispenser and Billing System", in Recent Advances in Artificial Intelligence and Data Engineering, pp 51-63, Springer, November 2021. DOI: 10.1007/978-981-16-3342-3_5
- Anisha P. Rodrigues, Joyston Menezes, Roshan Fernandes, Aishwarya, Niranjan N. Chiplunkar, Vijaya Padmanabha, "Identification and Classification of Paddy Crop Diseases Using Big Data Machine Learning Techniques" published in Data Science and Data Analytics: Opportunities and Challenges (1st ed.). Chapter No. 4, eBook Published:23 September 2021, eBook ISBN:9781003111290, Chapman and Hall/CRC. https://doi.org/10.1201/9781003111290.
- Satish Chander, P. Vijaya, "Unsupervised Learning Methods for data clustering", Book Chapter in Artificial Intelligence in Data Mining Theories and Applications", pp. 41-64, 2021, Academic Press, Elesvier.
- Fernandes, Roshan and Arjun P. Gaonkar, Pratheek J. Shenoy, Anisha P. Rodrigues, Mohan B. A., and Vijaya Padmanabha. "Efficient Virtual Reality-Based Platform for Virtual Concerts." In Multimedia and Sensory Input for Augmented, Mixed, and Virtual Reality, pp. 148-164, IGI Global, 2021. http://doi:10.4018/978-1-7998-4703-8.ch008.

• P. Vijaya, Satish Chander, "Metasearch engine: A technology for Information extraction in Knowledge Computing", Book Chapter in *Knowledge Computing and its Applications:* Volume II, pp. 209-233, April 2018, Springer Nature, Singapore.

Funded Research Project

- P. Vijaya,"FWSAO: Fractional White Smell Agent Optimization trained Transfer Learning for Melanoma Classification", The Research Council Funded Project for the year 2023-2025.
- P. Vijaya, Joseph Mani, Basant Kumar, and Rajeev Rajendran, "Mathematical Model to predict at risk students using hybrid optimized Deep Q Network" for the year 2021-22
- S.L. Gupta, P. Vijaya, Satish Chander," DEEPeduOM: A Novel prediction approach using Deep learning for academic quality evaluation in Oman", The Research Council Funded Project for the year 2018-2020.
- P. Vijaya, Satish Chander, "Academic Students' Performance Prediction Model: Oman Case Study", Internal Funded Research Project, Department of Computer Science & Engineering for the year 2017-18.

Patent

• Dr. P. Vijaya, Dr. Satish Chander, "IOT Network and Drone Based VIP Protection System", published in Patent Journal, Intellectual Property, India, on 18/10/19.

Reviewer in the International Journal and Conference

- International Journal of Signal and Imaging System Engineering,
- PeerJ Computer Science
- Network: Computation in Neural Systems
- Optimal Control Applications and Methods
- Journal of Information and Knowledge Management
- IIOAB Journal ISSN: 0976-3104
- Alexandria Engineering Journal ISSN: 1110-0168
- Indian Journal of Science and Technology Print ISSN : 0974-6846, Online ISSN : 0974-5645
- Journal of Intelligent Systems ISSN: 2191-026X
- International Conclave on Innovations in Engineering & Management (Oman Vision 2020: Opportunities & Challenges), February 24-25, 2016, Muscat, Oman

- Journal of Grid Computing,- ISSN:1570-7873
- Biomedical Engineering /Biomedizinische Technik- ISSN:1862-278X
- Journal of Computer Science –ISSN: 1549-3636
- Engineering Science and Technology, an International Journal ISSN: 2215-0986
- International Journal of Pattern Recognition and Artificial Intelligence ISSN: 0218-0014
- Computers and Electrical Engineering ISSN: 0045-7906

Professional Affiliations

- Member of Indian Society of Technical Education(ISTE) LM41960
- Member of International Association of Engineers(IAENG) 165004
- Member of Institute of Research Engineers and Doctors (theIRED) (membership number: AM 10100058010)
- Member of Computer Society of India I1504416
- Member of Internet Society
- Member of IEEE 99937570
- Member of Oman Information Technology Society

Conferences/Workshops attended:

- 1st International Conference on Innovation in Information Technology and Business(ICIITB 2022) in Modern College of Business and Science, November 9th -10th 2022, Modern College of Business and Science.
- International Conference on Computational Science and Sustainable Technologies on , Christ University, Bangalore, India, May 08-09, 2023.
- IEEE International Conference in Artificial Intelligence and Data Engineering(AIDE 2022), NMAMIT, Nitte, 22-23 December 2022
- IEEE 17th India Council International Conference(INDICON), Delhi, December 10th-13th, 2020
- IEEE Co-sponsored International Conference on Promoting Entrepreneurship & Technological Skills: National Needs, Global Trends –MIC2018, Majan University College, 19-20, March, 2018.
- Attended faculty development program on Data Science using R Programming for WCAS Engineering Faculty members from 30/1/18 to 1/2/18.
- International Conference on Infocom Technologies and Unmanned Systems (ICTUS 2017), Amity University Dubai on 18th to 20th, December 2017
- Attended a one day Lecture on Autonomous Vehicles and Artificial Intelligence Current Developments Related to the Autonomous Vehicle and Artificial Intelligence by Dr. Britta Lang, Technical Director Education and Evaluation 4E Road Safety and Transport Consultants FZ LLC on 13/12/17 which was organized by SQU in collaboration with Oman Society of Engineers and IEEE Oman Section.
- Free Open Source Software Conference-Oman 2017, Sultan Qaboos University, Feb 14-15, 2017.

- International Conclave on Innovations in Engineering & Management (Oman Vision 2020: Opportunities & Challenges) February 24-25, 2016.
- Faculty Development Program on Research Methodology, August 2015.
- Workshop on Advance Routing & Switching, Organized by Waljat College of Applied Sciences, March 10, 2015.
- Workshop on Ethical Hacking, Organized by Waljat College of Applied Sciences, March 30, 2015.
- Workshop on Big Data, Public Establishment for Industrial Estates (PEIE), September 8, 2015.
- Workshop on Unleasing Your Research Potential, Organized by Arab Open University Campus, Muscat, Sultanate of Oman, April 30, 2015.
- International Conference on Intelligent Cloud Computing (ICC), Organized by GU- Tech Muscat, Sultanate of Oman, February 24-25, 2014.
- Workshop on Deploying & Managing Windows Server 2012 R2, Organized by Waljat College of Applied Sciences, Muscat, Sultanate of Oman, April 21, 2014.
- Workshop on Photoshop, Organized by Waljat College of Applied Sciences, Muscat, Sultanate of Oman, January 13-15, 2014
- Workshop on Computer Networking, Organized by Waljat College of Applied Sciences, Muscat, Sultanate of Oman, April 3-4, 2013.
- International Conference on Knowledge Management & Resource Sharing, Organized by Waljat College of Applied Sciences, Sultanate of Oman, February 27-28, 2012.
- International Conference on Service Industry: Challenges & Opportunities Organized by Waljat College of Applied Sciences, Muscat, Sultanate of Oman, September 13-14, 2006.
- International Conference on Knowledge Management & Resource Sharing, Organized by Waljat College of Applied Sciences, Sultanate of Oman, February 27-28, 2012.

Training Program Topic	: Photoshop & Adobe Flash
Client Role Period	 Ministry of Education Content Development and Resource Person 2010
Training Program Topic	: Oracle Discoverer
Client	: Oman Telecommunications Company, Muscat, Oman
Role	: Content Development and Resource Person
Period	: 19 May – 24 May, 2007
Training Program Topic	: PSPP
Client	: MOHE & HEI's Faculty members

Training / Consultancy Assignment Handled

Role
Period

: Content Development and Resource Person : 1/5/2016

Subject Taught

- Data Mining & Warehousing
- Artificial Intelligence and Expert Systems.
- Embedded System and Design
- System Programming
- Distributed System
- Distributed Computing
- Program Translation Techniques
- Distributed Operating System
- Genetic Algorithms
- Advanced Computer Architecture
- Database Management System
- Object Oriented Systems and Development
- Operating System
- Principles of Programming Languages

- Software Engineering
- Programming & Data Structures
- Microprocessor 8086 and its interfacing
- Web Application Techniques
- Logic Design
- Computer Networks
- System Programming & Tools
- Programming in Visual Basic
- Object Oriented Programming I
- Principles of Programming Languages
- Electronic Commerce and Applications

Laboratory

C, C++, JAVA, LISP, Multimedia Lab, SQL, R, Python

Computer Skills

Programming Languages	C, C+
Software Packages	MAT
Platforms	Wind

C, C++, JAVA, LISP, Python, R MATLAB, Octave, SPSS, PSPP, Latex Windows, Linux, Macintosh OS