# S.AMUTHA Assistant Professor Department of Computer Science amuthas@mannarcollege.ac.in 9442750538



# I. Academic Qualifications:

# **Master of Philosophy**

University : Manonmaniam Sundaranar University, Tirunelveli.
 Title : Medical Consultation to Remote Patients through Internet

• Year : 2002

# **Post-Graduation**

• Institution : Alamelu Angappan College for Women, Komarapalayam, Madras University

Degree : Master of Computer Application

• Year : 1997

# **Under Graduation**

• Institution: Vidyasagar College of Arts and Science, Udumalpet, Bharathiar University

• Degree : Bachelor of Commerce

• Year : 1994

# **II. Teaching Experience:**

• Under-Graduate: 22 years

• Post - Graduate : 16 years

- Lecturer at Sengunthar College of Arts and Science from 01/09/1997 to 31/05/1998.
- Lecturer at Vidyasagar College of Arts and Science from 01/07/1998 to 26/11/2001.
- Lecturer at Madurai Sivakasi Nadar's Pioneer Meenakshi Women's College, Poovanthi from 05/12/2005 to 23/06/2006.
- Assistant Professor at Mannar Thirumalai Naicker College, Madurai from 03/07/2006 to present.

#### **Area of Specialization**

- C, C++, JAVA, Python, R
- Software Engineering
- Database Management System
- Artificial Intelligence

# III. Papers Published in UGC Notified Journals:

- Authored an article titled "An Overview of Software Testing Methods" published in the proceedings of the National Conference on Innovative Trends in Computing & Technology held on 25.02.2015, with ISBN 978-93-80686-03-5.
- Authored an article titled "Departure based Healthcare Insurance Fraud Detection using Data Mining Techniques" presented at the National Level Seminar on "A Digital Transformation Entrepreneur & Infopreneur 2K20", March 2020, with ISSN 2347-6648.

- An article titled "APPLICATION OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE INDUSTRY" published in the Journal of the Maharaja Sayajirao University of Baroda, Volume 54, No. 2 (VI) 2020, ISSN 0025-0422.
- Authored an article titled "Applications of Deep Learning and Machine Learning in Healthcare Domain A Literature Review" published in the International Journal of Electrical Engineering and Technology (IJEET), Volume 11, Issue 8, October 2020, ISSN Print: 0976-6545, ISSN Online: 0976-6553, Pages 113-126.
- Dr. M. Lalli and S. Amutha co-authored an article titled "Tree Based Feature Selection Method for Disease Survival Prediction Using Machine Learning Techniques" published in Webology International peer-reviewed journal, Volume 18, Number 3, December 2021, ISSN: 1735-188X, Pages 630-649.

# IV. Papers presented in conferences / Seminars:

- The paper titled "Introduction to Trends and Techniques in Data Mining" was presented at a National Level Seminar held at SRNM College, Sattur on 27.01.2011.
- The paper titled "An Overview of Software Testing Methods" was presented at the National Conference on Innovative Trends in Computing & Technology held at Arul Anandar College, Karumattur, Madurai on 25.02.2015.
- The paper titled "Big Data Assisted Bio-Medical Information using Map Reduce Framework" was presented at the National Conference on Computing Trends and Technologies held at Subramanya College of Arts and Science, Palani on 09.03.2017.
- The paper titled "Departure Based Health Care Insurance Fraud Detecting Using Data Mining Techniques" was presented at the National Level Seminar on "A Digital Transformation Entrepreneur & Infopreneur 2K20" held at Mannar Thirumalai Naicker College, Madurai on 24.01.2020.
- The paper titled "Application of Convolutional Neural Network in the Prediction of Breast Cancer" was presented at the International Conference on Mathematical Modeling and Computational Science ICMMCS'23 held at Mother Theresa Women's University on 24.02.2023 & 25.02.2023.
- The paper titled "A Novel Approach for Skin Cancer Prediction using Deep Learning Classification Techniques" was presented at the International Conference on Emerging Computational Intelligence 2K23 held at NadarSaraswathi College of Arts and Science, Theni on 09.03.2023 and 10.03.2023.
- The paper titled "Significant Applications of Machine Learning for Health Care" was presented at the Two Days International Conference on "Data Science" ICDS'23 with ISBN No: 978-81-965401-0-4, held on 04.09.2023 and 05.09.2023.

# V. Faculty Development Programme / Short Term Course attended:

- Attended a Faculty Development Programme titled "Certificate in .NET Programming" conducted by ICTACT & Thiagarajar School of Management, Madurai from 19.04.2012 to 26.04.2012.
- Participated in a Faculty Development Programme on "FREE AND OPEN SOURCE SOFTWARE" organized by Thiagarajar College of Engineering, Madurai on 29.08.2015.
- Completed a Faculty Development Programme "Introduction to PHP Programming" offered by ICTACT & KLN College of Engineering, Madurai on 22.12.2015 and 23.12.2015.
- Joined a Faculty Development Programme "SOFTWARE SAFETY AND SECURITY" at Thiagarajar College of Engineering, Madurai on 9.09.2016.

- Engaged in a Faculty Development Programme focused on "Machine Learning Techniques" at Mother Teresa Women's University, Kodaikanal on 03.12.2019 and 04.12.2019.
- Completed a 2 weeks National level FDP on "Managing Online Classes and Co-Creating MOOCS" organized by Ramanujan College, University of Delhi, Sponsored by MHRD from 20.04.2020 to 06.05.2020.
- Participated in an International level FDP "Current Technologies in IT Industries" held at Nallamuthu Gounder Mahalingam College, Pollachi from 14.05.2020 to 18.05.2020.
- Attended a State level FDP on "Software Project Management using Artificial Intelligence" conducted by The American College, Madurai on 14.05.2020 and 15.05.2020.
- Completed a Five days FDP on "Data Science using Python" at Kongu Engineering College, Erode from 20.05.2020 to 25.05.2020.
- Participated in a National level FDP on "Data Science Research Opportunities" organized by Sri Ramakrishna College of Arts and Science, Coimbatore on 21.05.2020.
- Engaged in an International level FDP "New Paradigms of Teaching" at Nallamuthu Gounder Mahalingam College, Pollachi from 22.05.2020 to 29.05.2020.
- Completed a National level FDP on "Artificial Intelligence" for one week organized by PVKK
   Vardhaman College of Engineering in collaboration with BrainOvision Solutions Pvt. Ltd. from
   22.05.2020 to 26.05.2020.
- Participated in a National level FDP on RDBMS PostgreSQL conducted by Sona College of Technology in association with Spoken Tutorial, IIT Bombay funded by on 23.05.2020.
- Attended a National level FDP on "AI based Proctoring in Next Generation Education" organized by SHASUN Jain College for Women on 23.05.2020.
- Participated in a Five days FDP on "Moodle Learning Management System" organized and participated by Government Arts College for Women, Salem from 02.06.2020 to 06.06.2020.
- Engaged in a Five days FDP on "Moodle Learning Management System" at Mannar Thirumalai Naicker College in association with Spoken Tutorial, IIT Bombay funded by MHRD from 06.06.2020 to 10.06.2020.
- Attended a National level FDP on "Open-Source Tools for Research" organized by Ramanujan College, University of Delhi, Sponsored by MHRD from 08.06.2020 to 14.06.2020.
- Completed an International level Course "E-Shodh Sindhu Web of Science Certification Series 5 sessions" by Clarivate Shodh Dindhu, South and South East Asia from 15.06.2020.
- Participated in a National level FDP "Practical Approach for Data Science" organized by RNGPIT in association with CSI and SSIP from 22.06.2020 to 27.06.2020.
- Attended the Virtual Book Launch of "Future of Higher Education Nine Mega Trends" organized by ICT Academy on 30.06.2020.
- Engaged in a National level FDP on "The Power of Routing Protocols: CISCO Packet Tracer" at Gobi Arts & Science College, Gobichettipalayam, Tamil Nadu from 01.07.2020 to 03.07.2020.

- Completed an FDP on "E-Content Development and Deployment TECH Tricks for Teachers" organized by Thassim Beevi Kader College for Women, Kilakarai, Ramanathapuram from 01.07.2020 to 03.07.2020.
- Attended an International level FDP on "Data Science Prerequisites" at The Standard Fireworks Rajaratnam College for Women, Sivakasi from 15.07.2020 to 18.07.2020.
- Participated in a National level FDP on "Recent Computing Technologies" organized by Vel Tech Multi Tech, Chennai from 30.11.2020 to 04.12.2020.
- Completed a National level FDP on "Emotional Intelligence" by ICT Academy, Chennai from 23.02.2021 to 27.02.2021.
- Engaged in a State level FDP on "Recent Research Directions in Applying Deep Learning for Health Informatics" at Arulmigu Kalasalingam College of Arts and Science, Krishnankoil on 19.05.2021.
- Attended a State level FDP "Fundamentals of Artificial Intelligence" by ICT Academy, Chennai from 14.06.2021 to 18.06.2021.
- Participated in a State level FDP "Introduction to Machine Learning" at Indra Gandhi Delhi Technical University for Women from 21.06.2021 to 25.06.2021.
- Engaged in a State level FDP "Recent Advancements of ML in Terms of AI and IoT" organized by SRM Institute of Science and Technology, Chennai from 12.07.2021 to 25.07.2021.
- Completed a State level FDP "Microsoft Azure Data Fundamentals" by ICT Academy, Chennai from 28.03.2022 to 30.03.2022.
- Attended an International level FDP "Exploring Technological Advancements: A Voyage into Emerging Horizons" at Sri S.Ramasamy Naidu Memorial College, Sattur from 20.11.2023 to 27.11.2023.
- Participated in a National Level Online FDP on "Python Programming with Django Framework for Building Web Applications" organized by CMR Engineering College from 12.02.2024 to 16.02.2024.

# VI. Workshop / Conference/ Seminars Attended:

- Attended a state level seminar on "Wireless Network and VOIP" organized by Microvillage, Madurai on 02.08.2008.
- Participated in a National level seminar on "Web Engineering" at Sri Meenakshi Government College for Women, Madurai on 10.03.2010.
- Attended a national level seminar on "Research Issues in Computer" at Sri Meenakshi Government College for Women, Madurai on 08.01.2011.
- Joined a state level seminar on "Web Applications" at The Madura College, Madurai on 28.02.2011.
- Participated in a State level seminar on "Free Open-Source Software" at Sourashtra College, Madurai on 26.12.2011.
- Attended a state level seminar on "Data Networks" at The Madura College, Madurai on 14.03.2013.
- Joined a state level seminar on "Imminent Trends in Advanced Computing and Technology" at Senthamarai College of Arts and Science, Madurai on 13.04.2013.

- Participated in a State level seminar on "Applied Data Mining" at Sri Meenakshi Government College for Women, Madurai on 20.01.2015.
- Attended a state level seminar on "Industrial Perspective of Software" at Mangayarkarasi College of Arts and Science for Women on 31.01.2015.
- Joined a National Conference on "Innovative Trends in Computing &" at Arul Anandar College, Madurai on 25.02.2015.
- Participated in a National Conference on "Walk on Soft Computing" at Mangayarkarasi College of Arts and Science for Women on 30.01.2016.
- Attended a state level workshop on "MOOCs through SWAYAM" on 19.11.2018.
- Participated in an International Seminar on "Bigdata Analytics" at Madurai Kamaraj University, Madurai on 21.02.2019.
- Joined a national level workshop on Python organized by IIT Bombay & Thiagarajar College of Engineering, Madurai on 22.06.2019.
- Attended an International Seminar on "Artificial Intelligence" at Madurai Kamaraj University, Madurai on 23.09.2019.
- Participated in an International Seminar on "Big Data Analytics and Applications" at Mother Teresa Women's University, Kodaikanal on 25.11.2019.
- Attended a state level webinar on "Online Teaching and Learning" at G.T.N Arts College, Dindigul on 09.05.2020.
- Participated in a State level webinar on "Machine Learning Algorithms, Applications and Trends" at SHASUN Jain College for Women, Chennai on 10.05.2020.
- Joined a state level webinar on "Assessment and Evaluation in Outcome Based Education" at G.T.N Arts College, Dindigul on 11.05.2020.
- Attended a state level webinar on "Artificial Intelligence" at G.T.N Arts College, Dindigul on 13.05.2020.
- Participated in a State level webinar on "Artificial Intelligence and its Applications" at Shri Krishnaswamy College for Women, Chennai on 13.05.2020.
- Joined a national level webinar on "Recent Trends and Research Opportunities in 5G & Beyond" organized by SRM Institute and Technology, Chennai from 25.05.2020 to 27.05.2020.
- Attended a state level webinar on "Change is the Essence of Life" organized by ICT Academy, Chennai on 25.05.2020.
- Participated in a State level webinar on "Emotional Intelligence" at G.T.N Arts College, Dindigul on 26.05.2020.
- Joined a National level webinar on "IoT and Its Application" at SLS.MAVMM.Arya Vaisyar College on 27.05.2020.
- Attended a national level webinar on "Transformational Mindset— Innovating Minds for Success" organized by Ramanujan College, University of Delhi on 01.06.2020.

- Participated in an International level webinar on "Do you have a Purpose" at G.T.N Arts College, Dindigul on 01.06.2020.
- Attended an international level webinar on "Blockchain Network in IoT Applications" at Ayya Nadar Janaki Ammal College, Sivakasi on 04.06.2020.
- Joined an International level FDP on "Artificial Intelligence and Machine Learning" at Baba Farid College, Bathindia from 07.07.2020 to 08.07.2020.
- Participated in a National level workshop on "Understanding OBS studio & Streamyard for E-Content" organized by Dr.M.G.R Educational and Research Institute, Chennai from 10.07.2020 to 11.07.2020.
- Attended a national level webinar on "Conceptual View of Machine Learning & Deep Learning" at Madurai Kamaraj University, Madurai from 13.07.2020 to 14.07.2020.
- Joined a national level webinar on "Linear Regression Model in Machine Learning" at Sri Eshwar College of Engineering, Coimbatore on 14.07.2020.
- Participated in a State level webinar on "Edge Intelligence" at Madurai Sivakasi Nadars Pioneer Meenakshi Women's College, Poovanthi on 20.07.2020.
- Attended a national level seminar on "Writing and Publishing Scientific Research Articles in SCI Journals" at Muthayammal Engineering College, Namakkal on 06.11.2020.
- Joined a national level webinar on "NAAC Reaccreditation Process During Post Covid Scenario" at Yadava College, Madurai on 10.11.2020.
- Participated in an International Webinar on "Cognitive Cyber Security" at Raja Doraisingam Govt Arts College, Sivaganga on 11.12.2020.
- Attended a national level webinar on "Artificial Intelligence and Machine Learning using Python" at Thassim Beevi Abdul Kader College for Women, Kilakarai, Ramanathapuram on 06.07.2021.
- Joined a National Webinar on "Implementation of Academic Bank of Credits" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi on 10.07.2021.
- Attended a State level Webinar on "Intellectual Property Rights" organized by Tamil Nadu State Council for Science and Technology, Chennai on 04.08.2022.
- Participated in an International Webinar on "Design Thinking on Innovation & Life Skills" at SNMV College of Arts and Science on 28.10.2022.
- Attended a National level Seminar on "Big data and Challenges" at Bharathidhasan University on 26.11.2022.
- Participated in an International Conference on "Application of Convolutional Neural Network in the Prediction of Breast Cancer" at Mother Theresa Women's University from 24.02.2023 to 25.02.2023.
- Joined an International Conference on "A Novel Approach for Skin Cancer Prediction using Deep Learning Classification Techniques" at Nadar Saraswathi College of Arts and Science, Theni from 09.03.2023 to 10.03.2023.

# VII. Workshop/Conference/Seminar/ FDP Attended in MTNC:

• Attended a national level workshop on "Android Application Development" on 28.02.2017.

- Participated in a State level workshop on "E-Learning and E-Content" on 04.03.2017.
- Joined a state level workshop on "Online Teaching, Learning and Assessment using Moodle, MOOC platform, Open Educational Resources & Education Technology Tools" on 23.10.2017 & 24.10.2017.
- Attended a state level seminar on "Big Data Analytics" on 24.03.2017.
- Participated in a State level workshop on "Technicalities of Writing Research Proposal" on 29.06.2018.
- Joined a state level workshop on "TEAM BUILDING" on 20.07.2018 & 21.07.2018.
- Attended a state level workshop on "Intellectual property rights, skill development programmes, Innovations, Patents and setting up incubation centres" on 22.01.2019.
- Participated in a State level workshop on "One who can Do, Teachers! How to do?" on 08.03.2019.
- Joined a state level workshop on "One day Training and Production on Workshop of Outcome Based Education" on 09.03.2019.
- Attended a state level workshop on "Capacity Building Programme on Outcome Based Education" on 28.08.2019.
- Participated in a State level workshop on "Research Writing and Publications: Theory and Practice" on 19.10.2019.
- Joined an international workshop on "Algorithmic Thinking and Problem Solving" on 23.01.2020.
- Attended a National level FDP on "Online Faculty Enrichment Programme" from 13.05.2020 to 19.05.2020.
- Participated in a Five days FDP on "Moodle Learning Management System" from 06.06.2020 to 10.06.2020.
- Attended a National Level webinar on "Introduction to Data Science" on 11.06.2020.
- Joined a State level Webinar on "Entrepreneurship Training Webinar on Handmade face mask making" on 18.06.2020.
- Attended a state level webinar on "Art of writing Research Paper" on 08.07.2020.
- Participated in a National Level webinar on "Biodiversity: Life Insurance for our Changing World" on 26.05.2021.
- Attended a state level Webinar on "Technological Innovation and Artificial Intelligence" on 06.04.2022.
- Joined a National level FDP on "Enhancing Quality by Unearthing Innovative Practices EQUIP 22" from 18.04.2022 to 24.04.2022.
- Participated in a State level FDP on "Stress Management" from 22.08.2022 to 24.08.2022.
- Attended a State level FDP on "Dynamics of Research Publications" on 15.09.2022 and 16.09.2022.
- Joined a State Level FDP on "Consultancy and Corporate Training" on 17.03.2023.
- Attended a State Level FDP on "Insights of National Education Policy (NEP 2020)" on 18.03.2023.
- Participated in a National Level Online Workshop on "Chat GPT and AI Tools to Save 2 Hours of Work Daily" from 27.07.2023 to 28.07.2023.
- Attended a Hands-on Training on "Network Operating System Installation & Configuration" on

27.07.2023.

- Joined a Workshop on "Intellectual Property Rights" organized on 16.10.2023 and 17.10.2023.
- Participated in an International Level Online FDP on "AI Tools for Research and Publishing" from 14.02.2024 to 16.02.2024.

#### VIII. E-Quiz Attended:

- Attended a national level COVID 19 Pandemic General Awareness Quiz at Chandigarh Group of Colleges, Mohali on 10.04.2020.
- Participated in a national level E-Quiz on Cyber Security organized by K.S.R College of Arts and Science for Women on 09.05.2020.
- Took part in a national level E-Quiz on "Network Security" held at Government Arts College for Women, Pudukkottai on 29.05.2020.
- Engaged in a state level E-Quiz on "Artificial Intelligence" conducted at Yadava College, Madurai on 29.05.2020.
- Joined a state level E-Quiz on "World Environment Day 2020" at Mannar Thirumalai Naicker college, Madurai on 05.06.2020.
- Participated in a state level E-Quiz on "NETBITS" on Computer Networks organized by Mannar Thirumalai Naicker college, Madurai on 07.06.2020.
- Attended a state level UGC- NET SET paper 1 E-Quiz at Sri Krishnasamy Arts and Science College on 06.07.2021.
- Participated in a state level E-Quiz on Basic Statistics organized by Sakthi College of Arts and Science for Women on 18.06.2021.

# IX. Participated as Resource person / Judge:

- 1. Served as a resource person for "IIT Spoken Tutorial" at Dr. Zahir Husain College, Sivagangai on 08.03.2017.
- 2. Judged the "SCIART EXPO 2018" at Mangayarkarasi College of Arts and Science for Women, Madurai on 04.10.2018.
- 3. Judged the Art from Waste & Floral Arrangement event at SANGAMAM '19, Thiagarajar College of Arts and Science, Madurai on 16.12.2019.
- 4. Acted as a resource person for "Innovative Insights into Machine Learning and Its Applications" at Sermathai Vasan College for Women, Madurai on 28.05.2021.
- 5. Presented as a resource person for "GL File System and IO System" at Sourashtra College, Madurai on 13.05.2022.

# X. Online Test Attended:

1. Attended the Libre Office Suite - Writer test conducted by IIT Spoken Tutorial, Mumbai on 21.08.2017.

- 2. Participated in the Libre Office Suite Calc test conducted by IIT Spoken Tutorial, Mumbai on 21.08.2017.
- 3. Took part in the Java test conducted by IIT Spoken Tutorial, Mumbai on 17.09.2018.
- 4. Participated in the PHP & MySQL test conducted by IIT Spoken Tutorial, Mumbai on 04.03.2021.
- 5. Attended the Python test conducted by IIT Spoken Tutorial, Mumbai on 18.04.2022.
- 6. Participated in the R test conducted by IIT Spoken Tutorial, Mumbai on 27.03.2023.

# XI. Events (Seminars/Workshops/ICM/ Hands on Training) Organized:

- Organized the Intercollegiate Meet "OLYMPUS 2009" on 30.03.2009, attended by students from 8 colleges.
- Organized a Faculty Awareness Programme on "Spoken Tutorial Software Program Taking IT Training to Colleges" on 30.12.2016, which was attended by faculty members from 14 colleges.
- Coordinated the workshop on "Android Application Development" held on 28.02.2017, attended by B.Sc(CS), B.Sc(IT), BCA, B.Com(CA), M.Sc(CS), and M.Com(CA) students from MTN college.
- Organized a Faculty Development Programme on "Libre Office" on 11.07.2017, with participation from 103 faculty members at MTN college.
- Organized a Faculty Training Programme on "Libre Office" from 22.08.2017 to 24.08.2017, involving 103 faculty members at MTN college.
- Organized a Cluster College Workshop on "Practical Demonstration of Training and Process on IIT Spoken Tutorial" on 08.02.2018, attended by 10 faculty members from 5 colleges.
- Organized a State Level Workshop on Entrepreneurship Opportunities in IoT on 13.02.2020, with 250 faculty and students from in and around Madurai participating.
- Organized an Alumni Interaction Programme on 25.02.2020, involving III CS, IT, BCA, and II MSc students.
- Organized an International level FDP on "Moodle Learning Management System in association with IIT Spoken Tutorial, Mumbai" from 06.06.2020 to 10.06.2020, with 227 participants from various colleges.
- Coordinated the FOSS course (Free Open-Source Software) PHP & MySQL with demo classes from 27.01.2021 to 02.02.2021, and an online test on 03.03.2021 and 04.03.2021, attended by 18 faculty members and 222 students from the CS Department at MTNC, Madurai.
- Organized a national level seminar on Recent Trends in IT on 15.03.2021, with participation from 180 students and 19 faculty members from the CS department at MTNC, Madurai.
- Organized a Guest Lecture on Advanced Concepts in Python (Machine Learning and Deep Learning) on 14.12.2021, attended by III B.C.A & III IT Students (30+40).
- Organized an Alumni Interaction Programme on Guideline for Industrial Entry on 22.04.2022, involving III B.Sc(CS), III B.Sc(IT), and III BCA Students (150).
- Coordinated the IIT Spoken Tutorial FOSS Course from December 2021 to May 2022, involving faculty members and students from various disciplines.

- Organized an Alumni Interaction Programme on Building a Successful Career on 10.02.2023, attended by around 105 students from CS, IT, and BCA departments.
- Coordinated the IIT Spoken Tutorial FOSS Course from June 2023 to May 2024, involving faculty members and students from various disciplines.
- Organized a Hands-on Training on Network Operating System Installation & Configuration on 27.07.2023, attended by III B.Sc(CS), III B.Sc(IT), and III BCA Students (68).
- Organized the Inter Collegiate Meet on 06.03.2024, attended by 307 students from various colleges.

# XII Details of Project:

The project titled "Enhance learning Experience and Enable Remote, Real-Time Expert
Advice in Farming using Virtual Reality" was conducted by S. Amutha. It was successfully
completed with funding of Rs. 25,000 provided by Mannar Thirumalai Naicker College,
Madurai, during the academic year 2018-19.

# XIII Professional Recognition/ Award/ Prize/ Certificate, Fellowship received:

 Received appreciation from Spoken Tutorial, IIT Bombay for spreading awareness and conducting Software Training Workshops in 2018, 2019, 2022 and 2023.