Head & Assistant Professor
Department of Information Technology
karthika@mannarcollege.ac.in
9486364594

I. Academic Qualifications:

Doctoral Research - Ph.D

- University   : Madurai Kamaraj University, Madurai, India
- Title   : Quantify the Use and Effects of System Engineering
- Year   : 2014

Master of Philosophy

- University   : Madurai Kamaraj University, Madurai, India
- Title   : Architecture for Future ATM Network.
- Year   : 2009

Post-Graduation

- University   : Madurai Kamaraj University, Madurai, India
- Degree   : Master of Computer Science and Applications

  (Five Year Integrated Programme)
- Year   : 2001

II. Professional Experience

- Under-Graduate   : 9 years
- Post Graduate   : 23 years
- Master of Philosophy   : 2 years

- June 2019 to Till date worked as Head and Assistant Professor in Mannar Thirumalai Naicker College(Autonomous),Madurai .

- 2016 -2019 worked as Assistant Professor in IT Department in N.M.S.S.Vellaichamy Nadar College (Autonomous), Madurai .
- 2002 -2016 worked as Assistant Professor in MCA Department in N.M.S.S.Vellaichamy Nadar College (Autonomous), Madurai ,
- 2001-2002 worked as Assistant Professor in Computer Science Department in TBAK College for women, Kilakarai.

Area of Specialization

- System Engineering
- Cloud security
- Decision Support System
- Optimization technique in System Engineering
- Software Engineering

III Orientation Programmes /Short Term Courses attended

- FEP Education 4.0 for Sustainable Economic Development took place at Mannar Thirumalai Naicker College in April 2022.

- The Faculty Research Programme on Dynamics of Research Publications was held at Mannar Thirumalai Naicker College on 15th and 16th September 2022.

- The Educator Program on Cyber Security was conducted by ICT Academy, Chennai, from 3rd to 12th August 2022.

- A State Level Seminar on Intellectual Property Rights held at The American College, Madurai, on 3rd March 2023.

- FEP Insights of National Educational Policy NEP2020 ,scheduled at Mannar Thirumalai Naicker College in March 2023.

- FEP Consultancy and Corporate Training held at Mannar Thirumalai Naicker College in March 2023.

IV Books Published

S. No	Name/s of Author/s	Title of Book	ISBN	Month and Year
1	Dr.M.Karthika, Dr.T.Sujithra, Prof.R.Vanitha	An Introduction to Robotics	978-93-95341-17-2	Dec 2022
2	Dr.M.Karthika, Mrs.R.K.Vijayalakshmi, Mr.K.T.Tamilselvam	C Made Easy	978-93-95341-18-9	Dec 2022

V Patent Published

Title : Classification of Images Based on Extensive Context and Content feature set.

Month : March 2023

VI Research Experience

a. Guidance

S.No	Research Level	Awarded
1	M.Phil	7

b. List of Candidates

Sl.No	Name of the Candidate	Title	Year	University
1.	V.BACKIYA LAKSHMI (Reg.No.142205ER045)	DACHE Technique For Big-Data Applications Using The Mapreduce Framework	April 2015	Mother Teresa University, Kodaikonal
2.	V.J.FREADY BLESSON Reg.No:15255103	Conceivable Acquiring In Cloud Computing	April 2016	NMSSVN College, MKU - Madurai

3.	K. G. RANI ROOPHA DEVI Reg.No:15255102	Prediction Of Periodontitis Using Clubcf: Clustering Based Collaborative Filtering In Big Data Analytics	April 2016	NMSSVN College, MKU - Madurai
4.	K.SHIVA Reg.No:15255105	Big Data Processing HDFS Architecture For K-Anonymity Of Privacy Preserving Techniques Using Top Down Specialization	April 2016	NMSSVN College, MKU - Madurai
5.	S. ARUNA DEVI Reg.No:16255101	A Meta Heuristic Approach for scheduling the Loads in DFS for Cloud Environment using TABU Search	April 2017	NMSSVN College, MKU - Madurai
6.	M.MAHALAKSHMI Reg.No:16255102	Readable CDA document for Generation and Integration in Cloud using APIs	April 2017	NMSSVN College, MKU - Madurai
7.	THILAGANGA.V Reg No:16255106	A Prefetching Technique using HMM Forward Chaining for the DFS in Cloud	April 2017	NMSSVN College, MKU - Madurai

c. Details of Member/ Editor etc.,

S. No	Specification	Name of the Institution / University	Period
1.	BOS Member	Arul Anandar College, karumathur	2020-2021
2.	DC Member	Hindustan University , Chennai	2022 -2025

3.	DC Member	Department of Computer Applications,Madurai Kamaraj University, Madurai.	2023 ,2024

VII Publications

a. UGC Care/Scopus

• "Pattern For Gaining The Potency In Multivariate Dataset Through Clustering Using Poisson Distribution" in the Rabindrabharati Journal Of Philosophy, Vol. XXIV, No. 15, 2023.

• "Dynamic system for image retrieval by using comparative relevance feedback" in the International Journal of Humanities, Law, and Social Sciences, Vol X, Issue 1(J), 2023.

• "An Advanced Computations And Semantic Reasoning To Create An Intelligence System Using WSN" at the Artificial Intelligence and Internet of Things conference, published by Springer in April 2023. Link

• "An Overview of Hyperledger Fabric in Blockchain Framework over Virtual Networks" in the Journal of Emerging Technologies and Innovative Research, May 2023, Volume 10, Issue 5.

• "IoT Enabled Wireless Technology Based Monitoring and Speed Control of Motor Using Variable Frequency Drive" in Jasc: Journal Of Applied Science And Computations, June 2018, Volume 5, Issue 6.

b. Other Peer Reviewed Journals

- "A Meta-Heuristic Approach for Scheduling the Loads in DFS For Cloud Environment Using Tabu Search" was published in the International Journal of Engineering Development and Research (IJEDR), Volume 5, Issue 1, ISSN: 2321-9939, in 2017. Link

- "Readable CDA document for Generation and Integration in Cloud using APIs" appeared in the International Journal of Engineering Development and Research (IJEDR), Volume 5, Issue 1, ISSN: 2321-9939, in 2017. Link

- "A Prefetching Technique using HMM Forward Chaining for the DFS in Cloud" was published in the International Journal of Engineering Development and Research (IJEDR), Volume 5, Issue 1, ISSN: 2321-9939, in 2017. Link

- "Analysis OF Periodontitis Using Map Reduce In Big Data Analysis" was published in the International Journal of Engineering Trends and Technology (IJETT), Volume 35, Issue 5, ISSN: 2231-5381, in 2016.

- "Analysis Of Periodontitis Using R in Big Data" appeared in the International Journal of Computer Trends and Technology (IJCTT), Volume 38, Issue 1, ISSN: 2231-2803, in 2016. Link

- "A System To Analysis Real Time Big Data using Topdown Specialization" was published in the International Education and Research Journal (IERJ), Volume 2, Issue 6, ISSN: 2454-9916, on June 6, 2016. Link

- "Requirement Analytical And Check The Product Requirement Using Quality Function Deployment" appeared in the International Education and Research Journal (IERJ), Volume 2, Issue 9, ISSN: 2454-9916, on September 9, 2016. Link

- "Analysis of Periodontitis using Map Reduce inBig Data Analytics",IJETT Journal,ISSN : 2231-5381,Vol 35,2016

- "Vulnerabilities in process transformation in software reengineering with Agile Methodologies", SVNC Research Journal, ISSN 0976-2949 Volume 8, 2014.

- " Classified Risks in Software Reengineering in tree structure with light weight processes", SVNC Research Journal, ISSN 0976-2949 Volume 8, 2014.

- "Caching Web Services in Mobile Ad-Hoc Networks", SVNC Research Journal, ISSN 0976-2949 Volume 8, 2014.

- "Future Advertising in Ubiquitous Environment" International Conference on Emerging Trends in Technology, Science and Upcoming Research in Computer Science , ICDAVIM-15 ISBN: 978-81-931039-3-7,pp 620-633.

- Future Advertising in Ubiquitous Environment", International Journal of Science, Technology & Management, www.ijstm.com ,Volume No 04, Special Issue No. 01, April 2015,ISSN (online): 2394-1537,pp60-69.

- "An Approach to Analyze and Quantify the Functional Requirements in Software System Engineering", International   Journal of Computer Applications (0975 – 8887) Volume 43-No.24, April 2012.

- "Quantification of Functional   Requirements In Software System Engineering Using LPP", International Journal of   Engineering Research & Technology (Ijert) Vol. 1 Issue 5, July-2012.

- " Quantifying The Technical Performance Of The Process In System Engineering Using An LPP", International Journal   Of Engineering Sciences & Emerging Technologies,.Volume 3, Issue 1, pp: 74-80, August 2012.

- "Risk analysis for software Reengineering process transformation with XP", International Journal of Engineering Research & Technology (IJERT) Vol. 1 Issue 5, July – 2012, ISSN: 2278-0181.

- "The Classification andAnalysis of Risks in Reengineering System". *International Journal of Computer Applications* 39(18):57-61, February 2012.

- "A Risk-Driven Procedure for Reengineering Process Transformation Using XP", International Journal of Engineering Sciences & Emerging Technologies, August 2012.ISSN: 2231-6604 Volume 3, Issue 1, PP: 97-103 ©IJESET

c. Conference Procedings

- "Ability, Client suppleness and Group Presentation in Big Data" at the International conference ICDABMF'23, with proceedings published in February 2023.

- "An Overview of Combining the Blockchain Transaction and Prediction of Cryptocurrency Using Supervised Machine Learning Algorithm" at the International conference pn ICDABMF'23, with proceedings published in February 2023.

- "An Overview Of Hyper ledger Fabric In Blockchain Framework Over Networks" at the International conference NEXUS'23, with proceedings published in January 2023.

- Software System Engineering: Quantification of software, ICCIA 2012,March 1-3, Vivekanada College, Thirchengode.

- **"**Data Mining Tools in Decision Support system**",** GMI 2006, July 27-29, Coimbatore Institute of Technology, Coimbatore.

- "Socio-Economic Status Of The Women Entrepreneurs", Oct 2015,Womens cell,NMSSVN College, Nagamalai.

- "The Power Of later Vedic Women", Oct 2015, Womens cell,NMSSVN College, Nagamalai.

- "A Cognitive Based Development For Creative Teaching To Build Positive Attitude And Self Realization", NMSSVN College of Education,Madurai.

- "Quantifying the Tecnincal Performance of the Process using Assignment Problem",BIC'12,31st December,NMSSVN COLLEGE, Madurai.

VIII Membership in Professional Societies

S.no	Membership	Reviewer	year
1	Asian Journal of Computer Science and Technology -AJCST	Yes	2020-2022
2	Asian Journal of Computer Science and Technology -AJCST	Yes	2023-2025

IX FDP/Workshop /Webinar Attended

a. Other than MTNC

- Faculty Development Programme (FDP) on Moodle learning management system was conducted at IIT Mumbai from 6th June 2020 to 10th June 2020.

• A Short Term Training Programme (STTP) on Big Data Analytics took place at Saranathan College of Engineering, Tiruchirappalli, from 16th November 2020 to 21st November 2020.

• An International Webinar on Recent advancements in machine learning was held at Arul Anandar College, Karumathur, on 18th March 2021 and 19th March 2021.

• A National seminar on Successful startup founder was organized at Sethu Institute of Technology on 11th March 2021.

• An STTP on Exploring real-world Applications of blockchain technology with machine learning models was conducted at K.L.N. College of Engineering, Sivaganga, from 22nd February 2021 to 27th February 2021.

• A National Level STTP on Quality Enhancement Of Research In HEIs was held at the Department Of Mathematics, PSGR Krishnammal College for Women, Coimbatore, from 23rd September 2021 to 25th September 2021.

• An Online Course on PHP and MySQL was offered by IIT Mumbai on 4th March 2021.

• An STTP on Quality Enhancement of Research was conducted at PSGR Krishnammal College for Women, Coimbatore, from 23rd September 2022 to 25th September 2022.

• A Webinar on How Google Maps finds the shortest route between two locations was organized by Techlearn on 11th March 2022.

• A Short Term Course on Python Programming for Beginners was conducted by Techlearn on 14th March 2022.

• A Webinar on Leadership, Ethics and Values was held at UGC-HUMAN RESOURCE DEVELOPMENT CENTRE, Jai Narain Vyas University, Jodhpur, Rajasthan, on 23rd March 2022.

• An FDP on Solving Problems & Making Decisions was organized by ICT Academy from 21st February 2022 to 25th February 2022.

• An FDP on Cloud Computing and Cybersecurity took place at Hindustan Institute of Technology and Science, Chennai, from 22nd June 2022 to 24th June 2022.

b. Within MTNC

• A Seminar titled "One Day Capacity Building Program On Outcome Based" was conducted at Mannar Thirumalai Naicker College on 28th August 2019.

• A Seminar on "Algorithmic Thinking and Problem Solving" took place at Mannar Thirumalai Naicker College on 23rd January 2020.

• A Seminar on "e-Content Development" was held at Mannar Thirumalai Naicker College on 29th February 2020.

• A Faculty Development Programme (FDP) on "Quality Assurance And Sustenance in Higher Education" was organized at Mannar Thirumalai Naicker College on 11th March 2020.

- A Webinar titled "Introduction To Data Science" was conducted by Mannar Thirumalai Naicker College on 11th June 2020.

- A Webinar on "Entrepreneurship Training Webinar on Handmade Face Making" was organized by Mannar Thirumalai Naicker College on 18th June 2020.

- A Webinar titled "Lead by Example: Impress, Inspire And Influence" took place at Mannar Thirumalai Naicker College on 25th June 2020.

- A Workshop titled "Preparing for Admission During COVID" was conducted by Master Soft at Mannar Thirumalai Naicker College on 5th May 2021.

- A National Webinar on "BIODIVERSITY LIFE INSURANCE FOR CHANGING WORLD" was organized at Mannar Thirumalai Naicker College on 26th May 2021.

- An FDP on "Technological Innovation and Artificial Intelligence" was held at Mannar Thirumalai Naicker College on 6th April 2022.

- An FDP titled "Education 4.0 for Sustainable Economic Development" took place at Mannar Thirumalai Naicker College on 27th April 2022.

- An FDP titled "Enhancing Quality by Unearthing Innovative Practices-Equip 2022" was conducted at Mannar Thirumalai Naicker College, Madurai, from 18th April 2022 to 24th April 2022.

- An Educator Program on "Cyber Security" was conducted by ICT Academy, Chennai, from 3rd August 2022 to 12th August 2022.

- An FDP on "Dynamics of Research Publication" was held at Mannar Thirumalai Naicker College, Madurai, on 15th September 2022 and 16th September 2022.

- An FDP on "Insights of NEP 2020" was conducted at Mannar Thirumalai Naicker College, Madurai, on 18th March 2023.

X COURSE MATERIALS PUBLISHED

- .Net and C# made easy
- C Industrial Training
- Object Oriented C++- Crash course
- Java Programming Concepts
- Unix Network Programming

XI HIGHLIGHTS

- Organized Workshops in Various Programming Languages for our college and other college students during 2015-2016.

- AICTE-Steering Committee Member from 2005-2011 (6 Years).

- Produced 100 % Academic results in subjects like C# and .Net Framework, Graphics and Multimedia, Web Technology and Unified Software Development Process.

- Overall 100% result has been produced for 12 times consecutively.

- Guest Lecture delivered in the title of "Back Propagation Technique", for M.Sc Students.

- Organized a Two Day Workshop on "FLASH and PHOTOSHOP" on 4th & 5th March 2013.

- Coordinated as Co-Convener for the Inter collegiate Technical Symposium CONFLICT for the year 2004 – 2006, 2009, and 2011.

- Coordinated a two day workshop on "Soft Skills Development" during April 2009.

- Organizing Committee member for the State level Seminar in the year 2011.

- Question Paper Setter-Bharathidasan University (3years).

- Editing Board member of the National Level Seminar in the year 2012.

- Acted as an Editor for the student Magazine MARQUEE for the year 2007 to 2010.

- Familiar with the concept of Software System engineering, agile Methodology and its applications.

- Good background in Software Engineering, Lightweight Process, Optimization Techniques of Linear Programming.

- Good background in Kanban and LiPs Solver.
- Excellent public speaking and communication skills.

S. No	Name of the Programme	Name of the Institution	Topic	Date
1.	Association Guest Lectures	EMG Yadava College, Madurai	Research Innovation in Analytics and Intelligence	27.3.2023
2.	Association Guest Lectures	Fatima College, Madurai	Cyber Security	24.9.2022
3.	Association Guest	Fatima College,	Security	12.11.2019

	Lectures	Madurai	Issues	
4.	Association Guest Lectures	EMG Yadava College, Madurai	An Introduction to Deep Learning	29.07.2019

XII Resource Person

XIII Others

S. No	Name/s of Author/s	Title of Research Paper	Name of Journal	Volume no./Page no./ IISN	Month and Year

1	Dr.M.Karthika	Kadu namadhu Vazviyal	Tamil Illakana Illakiyangalin padhivugal	Pg No 70-73, 978-81-92-9395-3-7	Feb 2023

IV Slide Share Link:

1.   https://www.slideshare.net/DrMKarthikaparthasar
2.   https://www.slideshare.net/karthipartha