

**Name:** M.VASUMATHY

**Designation:** Assistant Professor

**Department:** Computer Science

**Email:** vasumathy@americancollege.edu.in



**Educational Qualification:**

NAME OF THE DEGREE	NAME OF THE INSTITUTION / UNIVERSITY	MONTH & YEAR
Ph.D.(Comp. Sci)	Manonmaniam Sundaranar University, Tirunelveli.	November 2016
M.C.A	Periyar University, Salem.	2006 – 2008
M.Phil. (comp.Sci)	Bharathidasan University, Trichy.	2002 - 2004
M.Sc.(comp. sci)	Madurai Kamaraj University College, Madurai.	1996 - 1998
B.Sc.(Maths)	Seethalakshmi Ramaswamy College for women,Trichy.	1993 - 1996

**ADDITIONAL MANDATORY QUALIFICATION**

\* Qualified **NATIONAL ELIGIBILITY TEST in Computer Science and Applications(Rollno : 37870625) , Dec 2012** organized by UGC, NEW DELHI

\* Qualified **STATE ELIGIBILITY TEST in Computer Science and Applications(Rollno : 03030342),Oct 2012**,Bharathiar University, Coimbatore, TamilNadu.

**TEACHING EXPERIENCE**

NAME OF THE INSTITUTION	CLASSES HANDLED	PERIOD
Madurai Kamaraj University College, Madurai.	M.C.A., M.Sc(CS), B.Sc(CS),B.C.A.	SEPTEMBER 2001 to SEPTEMBER 11, 2020
THE AMERICAN COLLEGE	B. Sc Computer Science, M.Sc Data Science,M.C.A.,	SEPTEMBER 14,2020 to TILL DATE

## AREA OF INTEREST

Data Structures , Compiler Design, Theory of Computation, Data Mining, Data Science , Block Chain Technology , Microsoft Azure Cloud.

## BOOK PUBLISHED

<b>Title of the Book</b>	<b>Name of the Publisher</b>	<b>ISBN NO</b>
<b>Data Science Using Python</b>	Scientific International Publishing House , January 2023	978- 93-5757-047-3

## PATENT

<b>Patent Title</b>	<b>DESIGN NO</b>
<b>MACHINE LEARNING BASED DEVICE FOR PLASITC WASTE</b>	407414 001

## RESEARCH PAPER PUBLISHED IN JOURNALS

1. Research Paper published in International Journal of Computers & Technology titled "THE IMPACT OF KNOWLEDGE MANAGEMENT PRACTICES IN SOFTWARE ENGINEERING" VOL 3, NOV-DEC 2012 ISSN 2277-3061.
2. Research Paper published in International Journal of Scientific Research – Journal of Computer Engineering titled " Evaluation of Applying Knowledge Management System Architecture in Software Development Environment" VOL 10, ISSUE 3 – APRIL 2013 ISSN 2278 – 8227.
3. Research Paper published in International Journal of Management Research and Review titled " Application of knowledge Management in System Development Life Cycle" VOL 3, ISSUE 4 – APRIL 2013 ISSN 2249 – 7196.
4. Research Paper published in Int.J.Computer Technology & Applications," A Study on Critical Success Factors and variables in implementing knowledge Management system in software Engineering",Vol5(6),DEC 2014 ISSN1978-1982.

5. Research Paper published in Int. J. of Advanced Research in Engineering And Management titled "A study on Impact of Knowledge Management Practices in IT companies of Tamil Nadu",VOL 02-ISSUE 04, 2016.
6. Paper published in International Journal of Computational Intelligence and Informatics titled, "Earlier Stage Identification of GlaucomaDisease using Segmentation Algorithm in IRIS image",VOL 8,ISSUE-1-JUNE 2018 ISSN 2231-0258.
7. "A Study on Intrusion detection and Prevention System for Knowlecge Management" International conference on Emerging trends and challenges , Volume , Year 2018.
8. Paper published in Int. J. of Engineering and Advanced Technology titled, "Fleet Automation using IoT Logistics",VOL 8,ISSUE -6,Aug 2019, ISSN;2249-8958. Paper published in Int. J. of Computer Sciences and Engineering titled,"Thrust Areas of Machine Learning and its current Scenario", VOL 7,ISSUE-10 , OCT 2019, E-ISSN 2347-2693.
9. Paper published in Int. J. of Engineering and Advanced Technology titled, "Real – Time Waste Controlling with ISB",VOL 9,ISSUE -2,DEC 2019, ISSN;2249-8958.
10. Paper presented at the International Conference on Digital Transformation,"Industry 4.0 Data Security Challenges and Research Directions" conducted by The American College , Madurai on March 2020.
11. Paper Published in International Journal of Biology, Pharmacy and Allied Sciences titled "Inventory Management Utilizing Xg Boost In The Prediction For Automation Of Agriculture Irrigation Systems", IJBPAS, November, Special Issue, 2021, 10(11): 612-622 ISSN: 2277–4998.
12. Paper titled" Mining Suitable Symptoms To Identify Disease Using Apriority and NBC " Presented on AICTE Sponsored 4th International Conference on Recent Trends in Advanced Computing – Computer Vision Based Machine Intelligence Paradigms – CVMIP – 2021 , published in SPRINGER Series on JAN 2023.
13. Paper presented in International Conference on " DATA TRANSFORMATION" ICDT' 23 20 – 21 April 2023, THE AMERICAN COLLEGE.
14. Paper published in SCOPUS "Exploring Data Mining Applications and Techniques: A Comprehensive Research Survey" International Journal Of Membrane Science And Technology , Vol. 10, No. 3,June 2023, Pp 2909-2919.

## RESEARCH PAPERS PRESENTED IN SEMINARS AND CONFERENCES

1. Participated and presented a paper on IT ENABLED SERVICES – EMERGING GLOBAL OPPORTUNITIES AND INDIA’S COMPETITIVENESS at PRIEST University, Thanjavur on Feb 7<sup>th</sup> · 2004.
2. Participated and presented a paper on MANAGING CALL CENTERS IN INDIA – OPPORTUNITIES AND CHALLENGES at Adaikala Matha Institute of Management, Thanjavur on Sep 28<sup>th</sup> , 2004.
3. Participated and presented a paper on MINING ACCESS PATTERNS IN COMMERCIAL WEBSITES at Bishop Heber College, Trichy on 9<sup>th</sup> Feb, 2008.
4. Participated and presented a paper on APPLICATION OF DATA MINING IN CUSTOMER RELATIONSHIP MANAGEMENT at Fatima College, Madurai on Feb 15<sup>th</sup> 2008.
5. Paper presented under the title “A Survey of Applying Knowledge Management System Architecture in Software Development Environment” at PSG college of technology on 25<sup>th</sup> of September 2009.
6. Participated in UGC sponsored National Level Workshop on “RESEARCH TOOLS AND TECHNIQUES IN COMPUTER APPLICATIONS” organized by Sri Govt. College for Women on 14<sup>th</sup> February, 2013.
7. Paper presented at the International conference on Emerging trends and challenges under the title “A Study on Intrusion detection and Prevention System for Knowledge Management” at NPR Arts and Science college on 28<sup>th</sup> Dec 2018.
8. Participated in National Seminar on “Artificial Intelligence and the Future of IT in Machine Learning Age” conducted by Sri Meenakshi Government Arts College for Women, Madurai on 1<sup>st</sup> April 2019.
9. Five Day International Workshop on “Building Data-Driven Solutions Using Data Analytics with ML and DL Algorithms 24 - 28 June, 2021 organized by Department of CSE, CBIT(A), Hyderabad, Telangana .
- 10 Participated and presented paper titled “ Mining Suitable Symptoms To Identify Disease Using Apriority and NBC “ on AICTE Sponsored 4th International Conference on Recent Trends in Advanced Computing – Computer Vision Based Machine Intelligence Paradigms – CVMIP – 2021 in VIT.

**PARTICIPATION IN FACULTY DEVELOPMENT PROGRAMMES/ SHORT TERM TRAINING PROGRAMMES sponsored by DST/AICTE(ATAL)/NPTEL**

S.No	PROGRAMME DETAILS	DURATION	INSTITUTION	SPONSORED BY
1	Artificial Intelligence & Machine Learning	13Feb-19Feb	Mother Teresa Women University, Kodaikanal	DST
2	PYTHON 3.8.3 Language	JAN 2020	IIT BOMBAY Spoken Tutorial, ,Funded by MHRD	MHRD
3	R Language	JAN 2020	IIT BOMBAY Spoken Tutorial,Funded by MHRD	MHRD
4	Block Chain Technology	8 weeks (Jan-Apr 2020)	NPTEL, SWAYAM,MHRD,India	NPTEL
5	Deep Learning techniques for Ambient Intelligence	02.11.2020-07.11.2020	R.M.D. Engineering College,Chennai	ATAL
6	Big Data Analytics	16.11.2020-21.11.2020	Saranathan College of Engineering,Trichy	STTP/AICTE
7	Block Chain	23.11.2020-27.11.2020	SKIT, Gramothan	ATAL
8	Data Sciences	07.12.2020-11.12.2020	Sri Krishna Institutions, Coimbatore	ATAL
9	Application of Emerging Technologies in Business	07-12-2020 to 12-12-2020	JNTUA School Management Studies and Directorate of Faculty Development & IQAC,JNTUA, Ananthapuramu	AICTE
10	Artificial Intelligence	04.01.2021-08.01.2021	PSNA College of Engg. & Tech., Dindugul	ATAL
11	Data Science for Healthcare"	2021-6-21 to 2021-6-25	Vivekanandha College of Engineering for Women	ATAL
12	Integrated Data Analytics - the Tools and Applications around Industry Verticals" f	2021-07-05 to 2021-07-09	Holy Cross College(Autonomous), Tiruchirappalli-2.	ATAL
13	Data Science and Big Data Analytics	28 – 6-2021 to 03-07-2021	Avinashilingam Institute for Home Science and Higher Education for Women	STTP
14	Artificial Intelligence for Computer Vision"	2021-07-26 to 2021-07-30	Indian Institute of Technology, Roorkee.	ATAL
15	"Role of Augmented Reality (AR) & Virtual Reality (VR) in Real – Time Applications"	07 – 11 , June 2021	Karunya Institute of Technology and Sciences.	ATAL

**PARTICIPATION IN FACULTY DEVELOPMENT PROGRAMMES/ SHORT TERM TRAINING PROGRAMMES**

<b>S.No</b>	<b>PROGRAMME DETAILS</b>	<b>DURATION</b>	<b>INSTITUTION</b>
1.	Big Data Tools	18 <sup>th</sup> - 23 rd May 2020	St. Martin Engineering College,Secunderabad
2.	Block Chain Technology	July 20 -24 , 2020	G.B.Pant Institute of Technology, UttarKhand
3.	Block Chain Security & Smart Contracts	June 15 – 20, 2020	Siddhartha Engineering College, VijayaWada
4.	Software project Mgmt using AI	May 14 & 15,2020	THE AMERICAN COLLEGE, Madurai
5.	Deep Learning and its Applications, Theory to Practice	July 6 -10,2020	SASI Institute of Tech, Andhra Pradesh
6.	Artificial Intelligence Applications through ML	July 14 – 18,2020	Balaji Institute of Science, Warangal
7.	DATA SCIENCE	July 20 -26,2020	Panimalar Institute of Technology, Chennai
8.	Data Science Using Python	May 20 – 24 ,2020	Kongu Engineering College, Erode
9.	Transition from Industry 4.0 to 5.0	June 15- 20,2020	Bharathiyar University
10	Emerging Technologies of 4 <sup>th</sup> Industrial Revolution	Jun 29 – July 4,2020	SRM Institute of Science and Technology, Kattankulathur.
11	BIG DATA ANALYTICS	July 28 – 31,2020	SRM Institute of Science and Technology, Kattankulathur.
12	Challenges in Cyber Crime	July 6 – 12,2020	MGR University,Chennai
13	DATA SCIENCE	Aug 4- 10,2020	NOIDA Institute of Technology
14	Cloud Computing with Microsoft Azure	Jun 22- 29,2020	TATA CONSULTANCY SERVICES
15	Machinc Learning with Python	July 6 -10, 2020	Hyderabad Institute of Tech & Mgmt,Telangana
16	Data Science : Hands on Using R	Aug 6 -11,2020	Sathyabama Institute of Technology.
17	Data Science using Python	Aug 3 – 16,2020	Sreyas Institute of Technology, Hyderabad
18	Cyber Security	June 26-30,2020	Lakireddy Bali Reddy College of Engineering, AP
19	IOT APPLICATIONS	June 01-05,2020	VIKAS GROUP OF INSTITUTIONS, AP
20	Digital Education	June 27- 03,2020	Bishop Appasamy College of Arts&Science,Coimbatore
21	AI using PYTHON	BrainOVision	Sep 14-19,2020

22	Advanced Research in Trends in AI, Image Processing	Bipin Tripathi Kumaon Institute of Tech, Gwarahat	Sep 25-30, 2020
23	Deep learning for Computer Vision	SRM Institute of Science and Technology, Chennai	02.11.2020-06.11.2020
24	Recent Trends in Computer Vision”	Lakireddy Bali Reddy College Of Engineering, Ap	17 June, 2021 to 19 June, 2021
25	Artificial Intelligence	AITHON 2021, KonguNadu College of Engineering and FourSteps Solutions.	10 Days, June 2021
26	Machine Learning Concepts and Applications	Vardhaman College of Engineering, Hyderabad	14 – 18 June, 2021
27	National webinar on “Data science to fight against covid 19 “	Rajshree group of Institutions and Hospital, Bareilly	June 2021
28	Building Data Driven Solutions Using Data Analytics with ML and DL Algorithms	Chaitanya Bharathi Institute of Technology, Telungana	24 – 28 June 2021
29	National webinar on “A Pandemic year for women what are we learning “	THE AMERICAN COLLEGE	30 June 2021
30	Multi Technology	Sridevi Women’s Engineering College, Hyderabad	28 June 2021 - 3rd July 2021
31	Recent Trends and Challenges in Computer Science & Engineering	Tirumala Engineering College , Guntur	5- 9 July 2021
32	International Bootcamp on Demystifying Practical Inferential Statistics with Data Science and Machine Learning Use cases	Sathyabama Institute of Science and Technology (Deemed to be University), Chennai	12th July – 17th July 2021
33	Role of Machine Intelligence for Information Retrieval”	GMR Institute of Technology, Rajam	06-11, July 2021
34	Big Data Analytics for cloud computing in python program	Annamalai University	9 & 10 July 2021
35	Recent advancements of machine learning in terms of AI & IoT	SRM Institute of Science and Technology, Ramapuram, Chennai	12 -25 July 2021
36	Fundamentals of AI	ICT ACADEMY	02 -06 Aug 2021

37	ML,DL,NLP HANDS ON PRACTICE	CHANDIGARH UNIVERSITY, MOHALI	02 Aug 2021 to 06 Aug 2021
38	3 Day seminar on “ Statistics for Research and Industry “	Sathyabama Institute of Science and Technology	-----
39	Trending Technology in Computer Science	Dr. MGR Educational and Research Institute	18 -22 ,Oct 2021
40	Advancements in security using deep learning	GMR Institute of Technology and Velagapudi Ramakrishna Siddhartha Engineering College	21-25, Mar 2022
41	Next Generation Computing : Key Trends, Challenges and Opportunities	SRM Institute of Science & Technology, Ramapuram Campus	18- 23, Apr 2022
42	Advanced Techniques in Computer science and applications	Saveetha college of liberal arts and science	19-23 Nov 2022
43	Recent Research convergence in Artificial Intelligence and Internet of Things	Bon Secours College for Women	21-25 Nov 2022
44	Emerging Research trends in Computing technologies	Dr. MGR Educational and Research Institute	28 Nov to 2 Dec,2022
45	IQAC	THE AMERICAN COLLEGE	20 Sep, 2022
46	Webminar on “Emerging Trends in Cyber Security”	Jeyaraj Annappaikiam College for women	20.12.2022
47	State level seminar on “Intellectual Property Rights”	THE AMERICAN COLLEGE, DEPT OF BCA	Feb 2,2023
48	Artificial Intelligence and Machine Learning	Sri Renganathar Institute of Technology , Coimbatore	20 – 24, Feb 2023
49	Workshop on “Art and Science of Methodical Scientific Writing & Publishing in a High Impact Journal”	THE AMERICAN COLLEGE	March 6, 2023
50	International seminar on “Recent Trends in Computing Intelligence & Industry 4.0”	Mannar Thirumalai Naicker College	March 24, 2023
51	International FDP on “Advanced Technologies	Mangaiyarkarasi College	July 24 – 28, 2023

	and Trends in Computing”		
52	National level Workshop on “ Chat GPT and AI Tools to save two hours of daily work “	Mannar Thirumalai Naicker College	July 27 - 28, 2023
53	National FDP on “Cloud Infrastructure( AWS)	Sathyabama Institute of Science and Technology	Aug 21 – 25, 2023
54	National FDP on “ Neural Networks “	Nehru Institute of Engineering and Technology	Sep 01 -02, 2023
55	STTP on “ Data Science in Business “	VIIT , PUNE	Sep 04 – 08, 2023
56	National FDP on “Edge Cutting Technologies in IT Field	Rajapayam Raju’s College	Sep 19 – 23 , 2023
57	International FDP on “ Quality Enhancement to facilitate Academic Excellence and Well being	Jyoti Nivas College, Hosur	Jan 16 -21, 2024

#### **PARTICIPATION IN WEBINARS**

1. Webminar on “Block Chain Beyond the Hype”,Dhanalakshmi Srinivasan College of Engineering,Chennai on 11-05-2020.
2. Webminar on “IIOT, IT-OT Integration”,Sri Eshwar College of Engineering,Chennai on 12-05-2020.
3. Webminar on “Data Science for Engineers”,Sri Eshwar College of Engineering,Chennai on 13-05-2020.
4. Webminar on “Artificial Intelligence and its Applications”,Shri Krishnaswamy College for Women,Chennai on 13-05-2020.
5. Webminar on “AI and Machine Learning”,Sri Eshwar College of Engineering,Chennai on 14-05-2020.
6. Webminar on “Cyber Security”,Sri Eshwar College of Engineering,Chennai on 15-05-2020.
7. Webminar on “Introduction to Devops”,Sri Eshwar College of Engineering,Chennai on 17-05-2020.
8. Webminar on “Demystify the Cloud”,Sri Eshwar College of Engineering,Chennai on 17-05-2020.
9. Webminar on “Block Chain Basics”,Sri Eshwar College of Engineering,Chennai on 18-05-2020.
10. Webminar on “Industry 4.0”,Sri Eshwar College of Engineering, Chennai 19-05-2020.
11. Wired seminar on “Python”,WinWays Informative Pvt,Ltd
12. Webminar on “Creative Technology & IOT”,Kumaraguru college of Liberal Arts and Science, Coimbatore on 30-05-2020.
13. Webminar on “Cloud Virtualization”,St.Joseph’s Institute of Technology,Chennai on 12-06-2020.
14. Webminar on “Cyber Security Trends in 2020 and Beyond”,The American College, Madurai on 13-06-2020.

15. Webinar on “Artificial Intelligence”,G.T.N. Arts College,Dindigul.
16. Participated in Virtual Conference on “World of ML and AI in Digital Era’, Sankara College of Science and Commerce on 29-05-2020 to 30-05-2020.
17. Three days Webinar on Recent Trends in ML and DL, Nehru Institute of Technology, in association with CSI from Aug 19- 21,2020
18. Webinar on “Microsoft Azure” by TASS Educational Trust,Sep 27,2020.
19. Webinar on “Data Science to fight against COVID 19 “,RajShree Institute of Management and Technology, Bareilly.
20. International Seminar On Statistics For Research And Industry ,“Sathyabama Institute Of Science And Technology” In Association With “Iste”,2021.
21. International Webinar on “Securing the Future : Machine Learning and Data Analytics in Cyber Security “ ,S.S.Duraisamy Nadar Mariammal College”, Sep 30, 2023.

### Lectures /Talks given:-

Delivered Lecture on YOUNG STUDENT SCIENTIST PROGRAMME held at THE AMERICAN COLLEGE, MADURAI, 31-05-2022.

### Participation in Activities of the Department

#### Co-curricular work

- Contribution in NAAC & AAA Criterion 3 Research Innovation and Extension and Citerion 1 Curriculam aspects and Review of Syllabus.
- Organised Seminar on “ Employability Skills “ through Mr. Shanmugam, HR, CTS.
- Prepared Syllabus for BOS for Data science using R and Competitive Skill Enhancement subjects.
- Contribution in BYTES conducted by computer science department in paper presentation and GeoTag photos for the events conducted in BYTES.
- Handled a session in ICDT’s Conference

### Other Activities / Academic Credentials:

- External Examiner – Lady Doak College, Madura College and Fatima College, Madurai,

### Administrative /Academic Position/s (held/currently holding):

Positions held / currently holding	Year - From (month/year) To month/year)
Admission Work (Member) – Department Level	July 2021 to till date
NAAC Working Committee(Member) – Department Level	21-06-2019 to till date