Name　　　　**: Dr. S.UMA**

Designation　**:** Professor

Department　**:** Computer Science

Qualification　**:** M.Sc., M.Phil., P.G.D.C.A., Ph.D.,

Experience　**:** Teaching : 20 Years　　Research: 15 Years

Area of Specialization(s)　**:** Data Mining

Email (Official ID)　　**:** uma.s@drngpasc.ac.in

Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D	Computer Science	Bharathiar University	2021
M.Phil	Computer Science	Bharathidasan University	2007
M.Sc	Information Technology	Bharathidasan University	2004
PGDCA	Computer Applications	Bharathiar University	2002
B.Sc	Computer Science	P.S.G.R Krishnammal College for Women	2001

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
Big Data - 301	-	Infosys Springboard	2024
Design Thinking Course	-	National Educational Alliance for Technology, Govt. of India & Turnip Innovations	2023
Diploma in Advanced Software Technology (DAST)	-	CSC Computer Education	2002
Hindi Diploma Examination	-	Central Hindi Directorate, MHRD, Govt. of India	1999

Research Guidance

Programme	No. of Scholars	
	Completed	**Pursuing**
Ph. D.	-	3
M. Phil.	1	-

Patents Published

Title	National/International	Published Date
Block Chain-Based Secure Voting System: Design And Implementation	Indian	24/05/2024
IOT based patients' health observation system using 6G Artificial Intelligence	Indian	20/01/2023
An Intelligent Management System and Method for Integrating Mobile Payment Applications with Other Mobile Applications While Protecting Against Security Vulnerabilities	German	20/12/2022

Research Publications (Indexed)

International

Gayathri.R, Uma.S, **Social Robot Face Emotion Recognition Using Wavelet Transformation**, Educational Administration: Theory and Practice, Vol. 30, Issue 6, pp. 01 – 05, 2024, ISSN: 2148 - 2403, Paper accepted, DOI will be received in two days **(Scopus Indexed)**

Banupriya C B, Uma.S, **Prevention and Detection Methods of Black Hole Attacks – A Review**, Educational Administration: Theory and Practice, Vol. 30, Issue 6, pp. 06 – 10, 2024, ISSN: 2148 - 2403, Paper accepted, DOI will be received in two days **(Scopus Indexed)**

Uma.S, **Leveraging Support Vector Machines For Early Disease Detection Using Electronic Health Records**, Educational Administration: Theory and Practice, Vol. 30, Issue 5, pp. 13647 - 13651, 2024, ISSN: 2148 - 2403 **(Scopus Indexed)**

Uma.S, Balamurugan.M, Chandru.P, Daniel Ebirayan.S, **Secure Data Access To Mobile Cloud Data Using Fusion of Finger Print and Face Biometric Authentication,** Advanced Engineering Science, Vol.56, Issue 1,2024, ISSN: 2096-3246 **(Scopus Indexed)**

Bhakyalashmi.E, Gokulkrishnan.G, Uma.S, **Honeypot for Securing Networking Devices**, Journal of Propulsion Technology, Vol. 44, Issue 6, pp. 6199-6206, 2023, ISSN: ISSN: 1001-4055 **(Scopus Indexed)**

Nisha.M, Gopi krishnan.S, Uma.S, **Voice Based Emotion Detection Using Convolutional Neural Network**, Journal of Propulsion Technology, Vol. 44, Issue 6, pp. 6073-6077, 2023, ISSN: ISSN: 1001-4055 **(Scopus Indexed)**

Uma.S, **An Enhanced Human Interaction Pattern Mining using Improved Genetic Based Partial Ancestral Graph**, TELEMATIQUE, Vol.21, Issue 1, pp.5189 – 5197,2022, ISSN: 1856-4194 **(Web of Science Indexed**)

Uma.S, Suguna.J, **An Enhanced Human Interaction Pattern Mining Using Genetic Based Partial Ancestral Graph Meet**, International Journal of Advanced Science and Technology, Vol. 29, Issue 7,pp. 14534 – 14541,2020, ISSN: 2005-4238 **(Scopus Indexed)**

Uma.S, Suguna.J, **Comparative Study of Human Interaction Pattern Mining Approaches**, International Journal of Advanced Science and Technology, Vol.28, Issue17, pp. 919-926, 2019, ISSN: 2005-4238 **(Scopus Indexed)**

Uma.S, Suguna.J, **Temporal Semantic Analysis Based Human Interaction Pattern Mining using Partial Ancestral Graph**, Research Journal of Applied Sciences, Engineering and Technology, Maxwell Scientific Organization, Vol 8 Issue12, pp.1487-1491,2014, ISSN: 2040-7459 **(SCI Indexed)**

Uma.S, Suguna.J, **Tree-Based Weighted Interesting Pattern Mining Approach for Human Interaction Pattern Discovery**, International Review on Computers and Software (IRECOS), Vol 8., Issue 11,pp. 2570-2575, 2013, ISSN 2533-1728 **(Scopus Indexed)**

Other Publications: International / National Journals

Uma.S, Suguna.J, **Human Interaction Pattern Mining Using Enhanced Principal Component Analysis**, International Journal of Informative & Futuristic Research, Vol.2, Issue 7,pp. 2279-2289, 2015, ISSN: 2347-1697

Uma.S, Suguna.J, **Human Interaction Pattern Mining Using Artificial Bee Colony Algorithm**, International Journal of Engineering Technology, Management and Applied Sciences, Vol. 3, pp.174-179, 2015, ISSN 2349-4476.

Uma.S, Suguna.J, **Human Interaction Pattern Mining Using Enhanced Artificial Bee Colony Algorithm**, International Journal of Innovative Research in Computer and Communication Engineering, Vol.3, Issue 9,pp. 2320-9798, 2015, ISSN:2320-9801

Saranya,R, Uma.S, **Handling Large Medical Images with Compressive Sensing and Peagasis protocol for energy optimization**, International Journal of Informative & Futuristic Research,Vol.4, Issue 2, pp.5216-5222, 2016, ISSN: 2347-1697.

Book Publications

Design Thinking, Dr. D.Kiruthika, Dr.S.Uma, Dr. D.Anandhi , Dr. P. Kavipriya, First Edition, Prime International Publication(India), December 2023, ISBN: 978-93-6010-168-8.

Uma.S, **Green IoT: Paving the Way for Sustainable Smart Cities**, Book Chapter in the Book **Emerging Trends in IoT**, – Ramana.S, Keerthi Vardhan.T ,Sivakumar.K, Thangaraj.K, Innovation Online Training Academy, Chapter 24, pp.206-212,May 2024, ISBN: 978-93-93622-43-3.

Presentations in Conference

Comparative Analysis of Machine Learning Algorithms for Historical Forex Rates, Second International Conference on Recent Trends in Computer Science and Data Analytics -2024 (ICRTCSDA'24), KPR College of Arts Science and Research, 2-Feb-2024.

A Survey on Black Hole Attack in MANET, International Conference on Computational Intelligence and Communication Technologies (ICCICT - 2K24)**,** Dr. N.G.P. Arts and Science College, Coimbatore, 4-Jan-24.

Analyzing the effectiveness of Social Media using Big Data Analytics, International Conference on Computational Intelligence and Communication Technologies (ICCICT - 2K24)**,** Dr. N.G.P. Arts and Science College, Coimbatore, 4-Jan-24.

Security and Privacy Issues in IoT, International Conference on Computational Intelligence and Communication Technologies (ICCICT - 2K24)**,** Dr. N.G.P. Arts and Science College, Coimbatore, 4-Jan-24.

A Tree-based approach for Human Interaction Pattern Mining, International conference, ICAC 2022, Bharathiar University, 4-March 2022.

Comparative Analysis of Human Interaction Pattern Mining Approaches, Two days International Conference on Recent Trends in Advanced Computing (ICRTAC-2019), Erode Arts & Science College, December 2019.

Filters in Digital Image Processing, International Conference Kathir College, Coimbatore, April 2016.

Human Interaction Pattern Mining Using Artificial Bee Colony Algorithm, International Conference on Technology, Science and Management Innovation TSMI-15, MM (PG) College, Fatehabad, Haryana, November 2015.

Inclusive curriculum design, NAAC sponsored National Seminar, CMS College of Science & Commerce, August 2015.

Research Issues and Techniques in Image Mining, National Conference on Emerging Trends in Computer Science Application and Technology, Dr.S.N.S Rajalakshmi College of Arts & Science, February 2011.

Participation in Conference

International

Second International Conference on Recent Trends in Computer Science and Data Analytics - 2024 (ICRTCSDA'24), KPR College of Arts Science and Research, 2-Feb-2024.

International Conference on Computational Intelligence and Communication Technologies (ICCICT - 2K24), Dr. N.G.P. Arts and Science College, Coimbatore, 4-Jan-24.

International Conference on Advanced Computing, ICAC 2022, Bharathiar University, Coimbatore, 3-Mar-2022 to 4-Mar-2022.

Two days International Conference on Recent Trends in Advanced Computing (ICRTAC-2019), Erode Arts & Science College, Erode, 13-Dec-2019 to 14-Dec-2019.

International Conference on Advanced Technologies for Research and Product Development (ICARPD '16) Kathir College, Coimbatore, 21-April-2016 to 22-April-2016.

International Conference on Technology, Science and Management Innovation TSMI-15, MM (PG) College, Fatehabad, Haryana, 29-Nov-2015.

National

NAAC sponsored National Seminar, CMS College of Science & Commerce, August 2015.

Participation in Seminars

Organic Electronic Devices, Local, Department of Electronics, CMS College of Science & Commerce, 03-06-2023.

Stress Management, National, Dept. of Electronics, CMS CSC, 17-02-2022.

Enthusiastic E-Teaching, National, DR SNS ARTS AND SCIENCE COLLEGE,, 31-05-2021.

Emotional Intelligence, National, KG COLLEGE OF ARTS & SCIENCE, 28-4-2020 to 2-5-2020.

Future Of Higher Education under The New National Education Policy - 2020, National, ASFASM and PWC, 05-09-2020.

Data Science, National, Department of IT,CMS CSC, 04-07-2020.

Artificial Intelligence Revolution, National, CMSCRD& CMS CS Departments, 09-06-2020.

Virtual Reality, National, CMSCRD& CMS CS Departments, 08-06-2020.

Research Ethics, National, CMSCRD, 05-06-2020.

Internet of Things, National, CMSCRD & CMS CS Departments, 5/6/2020 to 6/6/2020.

Applied Artificial Intelligence - An Industrial Approach, National, Tamilnadu College of Engineering, Karumathampatti, 03-06-2020.

Blended Learning in our New Rapid Responsibility, National, Dr.SNS Rajalakshmi College of Arts and Science, 21-05-2020.

Internationalization Of Education, National, ASFASM and PWC, 21-05-2020.

Good Teacher To Great Teacher, National, ASFASM and PWC, 21-05-2020.

Community College- A Prospective Alternate Learning Opportunity for Marginalized Youth, National, ASFASM and PWC, 18-05-2020.

Building Support Vector Machine Learning Model, National, CODEGNAN IT Solutions P LTD, 16-05-2020.

Robotic Process Automation, National, Nehru Arts and Science College, 16-05-2020.

Producing Employable Graduates, National, G.T.N Arts College,Dindigul, 15-05-2020.

National Level Awareness Quiz on Test Your Immunity on Fact Versus Fake News On Covid-19, National, SIIMS Business School, 08-05-2020.

NEXTGEN Computing Paradigm, National, PSG College Of Arts & Science, 07-05-2020 to 08-05-2020.

How to be secured in Digital Era, National, SRM Institute of Science and Technology, 05-05-2020.

Basics Of Cryptography and Network Security, National, Department of Computer Science and Engineering, Karpagam College of Engineering with Computer Society of India, 29-04-2020.

Latex training, National, Spoken Tutorial Project, IIT Bombay funded by National Mission on Education through ICT, MHRD, Govt. of India, 01-01-2020.

Participation in Workshop

Golden Opportunities in Higher Education, Vishwaniketan's Institute of Management Entrepreneurship& Engineering Technology [i MEET], Maharashtra, 19.04.2024.

Hands on Training on e-Tools for Research (Online), 2 Days Workshop, Department Of Mechanical Engineering and Center for Research and Development (CRD), K S R Institute for Engineering And Technology, 12/3/2024 and 13/3/2024.

Nep 2020: Opportunities and Challenges of HEIs in Achieving Gross Enrolment Rtion in Creatinh Human Resources to the Paradigm Industry Requirements, ICSSR Sponsored One-Day Workshop, Dr. N.G.P Arts and Science College, 16.02.2024.

Creation of Research ID, Five-Day National Level Workshop, BALA'S VV Academy, Chennai, 21.1.2024 to 25.01.2024.

Implementation of Outcome Based Education: Opportunities and Challenges-Learning Outcome Based Curriculum Framework, Two Days National level Workshop, NGM College, Pollachi, 20.03.2023 to 21.03.2023.

Aligning yourself to the Publishing Process, TwoDays workshop, e-workhop organized by Elsevier, 23.07.2020 to 24.07.2020.

Artificial Intelligence and Deep Learning, Two days Workshop, PSG College of Technology, 23.06.2018 to 24.06.2018.

Research and Related Tools, National, CMS COLLEGE, COIMBATORE, 16.04.2021 to 17.04.2021.

Introduction to IoT design with case studies, Workshop, Department of Electronics, CMS College of Science & Commerce, 02-03-2023.

Data Analysis using R Programming, Five Days National Level Workshop, Bala's V V Academy, 23-02-2023 to 27-02-2023.

National Intellectual Property Awarness Mission (NIPAM), IP Awarness/Training Program, Intellectual Property Office, Govt.of India, 11-04-2022.

Intellectual Property Rights (IPR), Two Days Virtual Workshop, CMS College of Science & Commerce, 04-04-2022 to 05-04-2022.

Research article writing and publishing with citation, One Day workshop, PSGR Krishnammal College for Women, Coimbatore, 15-12-2021.

Cyber Data Analytics, Online Short Term Training Program, VET Institute of Arts and Science, 09-12-2021 to 20-12-2021.

National Level E-Quiz 2021- UGC/NTA NET Paper-1 (General), E-Quiz, Sri Ramakrishna College of Arts and Science, Coimbatore, 26-10-2021.

Social Media Marketing, One day Workshop, Accent Techno Soft, Coimbatore, 02.09.2018 .

Research in data Mining using WEKA, UGC Funded workshop, Vellalar College for Women, 05-03-2014.

Enhancing Teaching Skills, Workshop, Sri Krishna College, 05-11-2012 to 07-11-2012.

Participation in Orientation Programme / Short Term Courses

Deep Learning Techniques for Social Media Analytics, One Week International FDP, Kongu Engineering College, Perundurai, 15.04.2024 to 20.04.2024.

Data Visualization, One Week Professional Development Programme, VNR Vignana Jyothi Institute of Engineering and Technology, 29-01-2024 to 03/02/2024.

Latest Trend and Techniques in Software Engineering: An Industry Perspective, International Online FDP, CHRIST University, Bangalore Central Campus, 20-01-2024 to 27-01-2024.

 PYTHON PROGRAMMING WITH DJANGO FRAMEWORK, One week Internship Programme , Marcello Tech, Trichy, 03-01-24 to 09-01-24.

Developing Human Potentials in Emerging Technologies in Computer Science, Twelve Days Virtual FacultyDevelopment Programme, Kongunadu Arts and Science College, 04.09.2023 to 16.09.2023.

Emerging Technologies in Computer Science Research, Seven Days International Virtual Faculty Development Programme, PPG College of Arts & Science, 19-12-22 to 27-12-22.

Teaching Strategies, Methodologies and Technologies in HEI's, Ten Days National Level Faculty Refresher program, IOT Academy, 19-09-22 to 30-09-22.

Environment Sustainability and Research Ethics, UGC STIDE sponsored Five Days on line training Programme, Avinashilingam Institute for Home Science and Higher Education for Women, 28-03-22 to 01-04-22.

Machine Learning, Deep Learning and Natural Language Processing Toolkit with Hand-on-Practice, One Week on line Faculty Development Program, Chandigarh University, Gharuan, Mohali, 02-08-21 to 06-08-21.

Artificial Intelligence & Machine Learning, Seven days International online Faculty Development Program, PPG College of Arts & Science, Coimbatore, 28-06-21 to 05-07-21.

Advanced Excel with data Visualization, One week Online Faculty Development Program, E & ICT Academy, IIT Kanpur, 21-06-21 to 26-06-21.

Python, One week Online Faculty Development Program, E & ICT Academy, IIT Kanpur, 14-06-21 to 19-06-21.

App Development with Android, One week Online Faculty Development Program, E & ICT Academy, IIT Kanpur, 07-06-21 to 12-06-21.

Digital Initiatives for Higher Education, International Online Two Weeks FDP, SWAYAM-NPTEL Local chapter, G.Venkataswamy Naidu College, Kovilpatti, 04-6-2020 to 17-6-2020.

Participation in Faculty Development Programme

Curricular Framework & Credit System for Four-Year UG Programme [NEP-2020 by UGC], Department of Academic Affairs, A2Z EduLearningHub LLP, 3-4-2024.

Canva – Design Like a Professional, One Day National FDP, IOT Academy, 24-11-2023.

Cloud Infrastructure (AWS), One Week National Level Faculty Development Program, BRAIN-O-Vision , AICTE, KG College of Arts & Science , 21-08-2023 to 25-08-2023.

Project Based Learning, One Day FDP, Department of Biochemistry, SBS, CMS College of Science & Commerce, 03-03-2023.

Data Science and it's Tools, Five Days Online Faculty Development Program, KG College of Arts & Science, 23-08-2022 to 27-08-2022.

Amazon Web Services (AWS), One Week on line Faculty Development Program, GITAM University, 22-08-2022 to 27-08-2022.

Funded Research Project Proposal Preparation and Submission Protocol, National Level Virtual Faculty Development Program, CMS College of Science and Commerce, 31-03-2022,

Presentation Skills, Five Days on line Faculty Development Program, ICT Academy, 27-12-2021to 31-12-2021.

Funding Opportunities for Research, One Day National Online FDP, CMS CRD, CMS College of Science & Commerce, 24-03-2021.

Intellectual Property Rights, One Day National Online FDP, IQAC, CMS College of Science & Commerce, 20-03-2021.

Online Faculty Development Programme On Neuropsychological functions and Emotion Processing Deficits, One Day National Online FDP, PSGR Krishnammal College For Women, 03-06-2020.

International Conference on Recent Trends in Advanced Computing (ICRTAC-2019), Two Days FDP, Erode Arts and Science College, 13-12-2019 to 14-12-2019.

Research Proposal Writing, One day FDP, CMS College of Science & Commerce, 30-11-2019.

Machine Learning, Three Days FDP, Bharathiar University, Coimbatore, 30-01-2019.

Artificial Intelligence and Deep Learning, Workshop, PSG College of Technology, 23-06-2018.

Seminar of Digital Marketing, Training, CMS College of Science & Commerce, 22-02-2017.

Cloud Infrastructure and Services, Five days FDP, Department of Computer Applications, Bharathiar University, 23-02-2015 to 27-02-2015.

Conference / Seminar / Workshop Organized

Organizer, Spoken Turorial Python 3.4.3 course, II B.Sc CS students (126 students), Department of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, January 2024 to April 24.

Organizer, Spoken Turorial CPP course, I B.Sc CS students (129 students), Department of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, January 2024 to April 2024.

Organizer, Spoken Turorial Python 3.4.3 course, I M.Sc CS students (53 students), Department of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, January 2024 to March 24.

Committee member, International Conference on Computational Intelligence and Communication Technologies (ICCICT - 2K24), Dr. N.G.P. Arts and Science College, Coimbatore, 4-Jan-24.

Committee member, Research and Related Tools, Two Days National Workshop by CMSCRD, CMS College of Science and Commerce, Coimbatore, 16.04.2021 to 17-04-2021.

Committee member, Essential Statistical Tools for Research, One Day FDP, CMS College of Science and Commerce, Coimbatore,31-10-2022.

Committee member, Funded Research Project Proposal Preparation and Submission Protocol, National Level Virtual Faculty Development Program, CMS College of Science and Commerce, Coimbatore,31-03-2022.

Committee member, Funding Opportunities for Research, One Day National Online FDP by CMS CRD, CMS College of Science and Commerce, Coimbatore, 24-03-2021.

Committee member, Data Science, National Seminar, Department of IT, CMS College of Science & Commerce, Coimbatore,04-07-2020.

Committee member, Artificial Intelligence Revolution, National Seminar, CMSCRD & CMS CS Departments, CMS College of Science & Commerce, Coimbatore,09-06-2020.

Committee member, Virtual Reality, National Seminar, CMSCRD & CMS CS Departments, CMS College of Science & Commerce, Coimbatore,08-06-2020.

Committee member, Research Ethics, National Seminar, CMSCRD, CMS College of Science & Commerce, Coimbatore,05-06-2020.

Committee member, Internet of Things, National Seminar, CMSCRD & CMS CS Departments, CMS College of Science & Commerce, Coimbatore, 05-06-2020 to 6-6-2020.

Committee member, Hybrid Mobile and Responsive web development, Two days workshop, Department of IT,CMS College of Science & Commerce, Coimbatore,01-09-2016 to 02-09-2016.

Invited Speaker / Seminar

Invited Speaker, Webinar on Demistifying Data Science, Pioneer College of Arts and Science, Coimbatore, 3-April-2024.

Member in BoS

Board of Computer Science, P.S.G.R.Krishnammal College for Women, Coimbatore, since 2020.

Editorial / Review Board Member

Review Board Member, on Sustainable Advanced Computing (ICSAC-2024), Departmeent of Computer Science, CHRIST University, Bangalore,22/3/2024 and 23/3/2024.

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Scientific International Publishing House	Life-time	-

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Distinguished Faculty Award	Scientific International Publishing House	2023