

**Dr.R.UMA**

**94/1,Halls Road Kilpauk,Chennai-10,**

**[E-Mail-umavina11@gmail.com](mailto:E-Mail-umavina11@gmail.com) Mobile-9444244644**

## **EDUCATION**

- X STD -SSLC- Christ King Girls Higher Secondary School, Tambaram, Chennai-1990- FIRST CLASS
- XII STD- HSC-Christ King Girls Higher Secondary School,Tambaram, Chennai.1992- FIRST CLASS
- B.E (EEE) at SRM Engineering College, Madras University -1996- FIRST CLASS
- M.E(CSE) at College of Engineering Guindy , Anna University – 2002- FIRST CLASS(FULL TIME)
- Ph.D. Anna University 2020,(PART TIME)  
Domain: Data Mining  
Title: A Novel Approach For Duplicate Elimination And Effective Topic Modeling For Document Clustering

**EXPERIENCE** : 24 years at Sri Sairam Engineering College from 1996-2000,

2002- till date

## **KEY RESPONSIBILITIES**

- Established positive relationships with students to facilitate learning.
- ISO Coordinator for CSE department
- Time Table Coordinator
- Symposium Coordinator
- Coordinator for International Conference ICICT'09for CSE department

- Acted as Co-Convener for International Conference on Computational Science ICCST'17 for CSE department
- NBA Coordinator
- NAAC Criteria 7 In-charge for the College.
- R & D Coordinator for the department
- FDP Coordinator
- Taken part in setting Question papers for Anna University exams
- Coordinated a Two Week Online Refresher Course On Recent Trends In Information, Computing, Communication and Teaching Methodology Competency
- Coordinated a One Week Online FDP on Open Source Tools For Data Analytics

#### **PROFESSIONAL SOCIETY MEMBERSHIP**

- Life Member, Indian Society for Technical Education **ISTE-LM 35689**
- IEEE Member-**98092243**
- Life Member, International Association for Engineers (**IAENG**)
- Life Member ,International Association of Computer Science and Information Technology (**IACSIT**)

#### **BOOKS PUBLISHED**

Published a Textbook on “PROGRAMMING WITH JAVA” , **ISBN 978-93-90548-36-1**,  
PUBLISHER BOOK RIVERS

Kindle Edition :ASIN : B092659QBC

Amazon : B0922TJHFK

[https://www.amazon.in/s?k=B0922TJHFK&i=digital-text&ref=nb\\_sb\\_noss](https://www.amazon.in/s?k=B0922TJHFK&i=digital-text&ref=nb_sb_noss)

#### **BOOK CHAPTER DETAILS**

- Published a Book Chapter in Handbook of Research on Deep Learning-Based Image Analysis Under Constrained and Unconstrained Environments, Chapter 9- Apple Leaf Disease Identification Based on Optimized Deep Neural Network, IGI GLOBAL PUBLISHER,DOI: 10.4018/978-1-7998-6690-9.ch009

## PATENT DETAILS

1. Filed an Indian patent titled "Virtual Reality Based Recruitment System" on 24.11.20 Application number :**202041051030**.Status –**PUBLISHED**
2. Filed an Indian patent titled “Micro Lecture Learning System Using Speech Recognition And Machine Learning”on 26/08/21 Application number :**202141038679 A** Status –**PUBLISHED**
3. Filed an Indian patent titled “IoT Based Energy Management System in Micro grid Using Lorawan” on 27/10/21 Application number :**202141049030**

## PAPERS PUBLISHED IN THE NATIONAL JOURNAL / INTER NATIONAL JOURNAL

1. Published a paper titled “**Content extraction after eliminating noisy information in web pages with web crawler**” in the SSEC Tech Journal, ISSN: 0975-2846, Vol.9,pp.100-113.
2. Published a paper titled “**Dynamic XML Dissemination supporting twig pattern queries**” in the IJAIST- International Journal of Advanced Information Science and Technology ISSN:2319-2682 Vol.17,Issue 17,September 2013
3. Published a paper titled “**Improving Service Credibility in Password Authenticated Peer Services**” in the IRACST-International Journal of Computer Networks and Wireless Communication(IJCNWC) ISSN:2250-3501 Vol.3 No6,December 2013
4. Published a paper titled “**Efficacious Clustering on Weighted Social Networks for Harmonized Probabilistic Graphs**” in the international journal of applied engineering and research August 2015.
5. Published a paper titled “**Enhanced Clustering of Correlated Probabilistic Graphs**” in the International Journal of Scientific Engineering and Research(IJSER)ISSN 2229-5518(2015) **SCOPUS INDEXED JOURNAL**.
6. Paper titled “**Sub-Topic Modeling-a Hierarchy Model for Topic Correlations**” has been published in the, International Journal of Control Theory and Applications IJCTA, 9(28) 2016, pp. 175-179 © International Science Press(ISSN: 09745572) **SCOPUS INDEXED JOURNAL**
7. Paper titled “**Multi agent based information retrieval system for Multimodal database**” has been published in the, International Journal of Printing Packaging and Allied Sciences, Vol.6, No.8, pp.2286 – 2299, ISSN: 2320 –4387, (**ANNEXURE-1**).

8. Paper titled “**Agent-based handling of parallel jobs in Cloud**” has been published in the, Australian Journal of Basic and Applied Sciences, 11(13) October 2017, ISSN:1991-8178 EISSN: 2309-8414,Pages: 117-123 **SCOPUS INDEXED JOURNAL.**
9. Paper titled “**Multiple Object Identification, Recognition and Tracking System**” has been published in the, International Journal of Pure and Applied Mathematics Volume 118 No. 18 2018, 3707-3713 ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version) url: <http://www.ijpam.eu> Special Issue **SCOPUS INDEXED JOURNAL.**
10. Paper titled “**Noise elimination from web pages for efficacious information retrieval**”, Cluster Computing The Journal of Networks, Software Tools and Applications ISSN 1386-7857 DOI 10.1007/s10586-018-2366-x Received: 6 February 2018 / Revised: 19 February 2018 / Accepted: 2 March 2018\_ Springer Science+ Business Media, LLC, part of Springer Nature 2018. published online:16<sup>th</sup> March 2018 **SCOPUS INDEXED,SCI INDEXED ,ANNEXURE 1 JOURNAL.**
11. Paper titled, ” **Agent-based handling of parallel jobs in cloud**”, Australian Journal Of basic and Applied Sciences, ISSN:1991-8178 EISSN: 2309-8414, 1(13) October 2017, Pages: 117-123, Received 10 August 2017,Accepted 1 October 2017,Available online 18 October 2017. Open Access Journal Published BY AENSI Publication© 2017 AENSI Publisher.
12. Published a paper titled ,”**Diagnosing Stealth Dyslexia Using Artificial Neural Networks**” , IJRAR February 2019, Volume 6, Issue 1 [www.ijrar.org](http://www.ijrar.org) (E-ISSN 2348-1269, P- ISSN 2349-5138) pp 126-130. **UGC JOURNAL.**
13. Published a paper titled “**A Survey on Content Extraction and Noise Elimination from Web Pages**” in the SSEC Tech Journal, ISSN:0975-2846,2019.
14. Published a paper titled “**Quality Detection System for Bananas**” in the International Journal of Research and Analytical Reviews May 2019, Volume 6, Issue 2 ,(E-ISSN 2348-1269, P- ISSN 2349-5138) IJRAR1APP024 (IJRAR) [www.ijrar.org](http://www.ijrar.org). **UGC JOURNAL.**
15. Published a paper titled “**Query Expansion For Medical Domain To Augment The Web Search**” in the ,International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-1, October 2019. **SCOPUS INDEXED.**

16. Published a paper titled, “**Intelligent Ant Colony Based Qos Optimization Routing In Manet**” Vol-5 Issue-6 2019 IJARIIIE-ISSN(O)-2395-4396 ,pp.1587-1595.

17. Published a paper titled, “**Smart Water Irrigation System Using IoT**”, in the Journal of Critical Reviews, Vol 7, Issue 14, ISSN2394-5125, 2020. **SCOPUS INDEXED.**

18. Published a paper titled ,”**Flood Susceptibility Prediction using LSTM Algorithm**”, in the Journal of Test Engineering and Management ISSN: 0193-4120 Page No. 1 - 08 , May-June 2020 ,**SCOPUS INDEXED**

19. Ramkumar, P., Uma, R., Usha, S., Valarmathi, R. ”Real Time Path Planning using Intelligent Transportation System for Hybrid VANET” ICPECTS 2020 - IEEE 2nd International Conference on Power, Energy, Control and Transmission Systems, Proceedings, 2020, 9337057. **SCOPUS INDEXED**

20. Venkatesh, D., Swankg, E.S., Valarmathi, R., Uma, R., ”PD Pattern Recognition on Transmission Lines using Tree-Based Models” ICPECTS 2020 - IEEE 2nd International Conference on Power, Energy, Control and Transmission Systems, Proceedings, 2020, 9336980, **SCOPUS INDEXED**

21. “A Hierarchical Machine Learning Frame Work to Classify Breast Tissue for Identification of Cancer “Ruth, J.A., Mahesh, V.G.V., Uma, R., Ramkumar, P. Lecture Notes in Electrical Engineering, 2022, 808 LNEE, pp. 504–515, **SCOPUS INDEXED**

#### SCOPUS ID

<https://www.scopus.com/authid/detail.uri?authorId=57218078186>

#### GOOGLE SCHOLAR LINK

<https://scholar.google.com/citations?user=Q1bENl0AAAAJ&hl=en>

citations-16

h-index-3

#### LINKEDIN PROFILE

<https://www.linkedin.com/in/uma-ranganathan/>

## PAPERS PRESENTED IN THE CONFERENCES

- Presented a paper on “Impact of Quality Management Models in Technical Education” at QQUEST-2003 C.
- Presented a Paper titled “Content Extraction after Eliminating Noisy Information in Web Pages with Web Crawler “in National Conference on Data mining and Distributed Applications conducted by Sathyabama University held on September 2011.
- Presented a Paper titled “Mining and Prediction in Mobile Commerce using Android” in the National Conference on Emerging Issues in Computer Applications for Modernization in IT,16<sup>th</sup> Feb 2013 organized by KSR College of Engineering.
- Presented a Paper titled “Dynamic XML Dissemination supporting twig pattern queries” in the National Conference on NCCSSP-2013,National Conference on Communication Systems and Signal Processing,19<sup>th</sup> October 2013
- Presented a Paper titled “Mining and Prediction in Mobile Commerce using Android “in the International Conference on Advanced Computing, Machines and Embedded Technology(ICACTION-2013)
- Presented a Paper titled “Reliable Symmetric Peer Services for only Password Authentication” in the National Conference of NCRICSE 2014,March 10,2014 RMK Engineering College.
- Presented a Paper titled “ Towards Reliable Service For Password Substantiation Peer Services ”in the International Conference on Electrical Communication and Computing ICECC-2014 13<sup>th</sup> & 14<sup>th</sup> March 2014.
- Presented a Paper titled “Efficacious Clustering on Weighted Social Networks for Harmonized Probabilistic Graphs” in the National Conference on Emerging and Innovative Trends in Computer Science NCEITC’15 at S.Veerassamy Chettiar College of Engineering and Technology on18th March 2015.
- Presented a Paper titled “A Survey on Object Encompassing with Swarm Robots” in the National Conference on Recent Trends in Information Technology (NCRTIT’15) at Adhiparasakthi Engineering College on 28th March 2015.
- Presented a Paper titled “Brain Tumor Detection Using Convolution Neural Network and Support Vector Machine” in the International conference on Computational Science and Technology, organized by dept of CSE, Sri Sai Ram Engineering College,9th and 10th March 2017.

- Presented a Paper titled “Fusing and Mining Opinions To Promote Healthcare” in the International conference of International conference on Electrical, Electronics& Computer Engineering , held at Vivekanandha College of Engineering for Women, 22<sup>nd</sup> & 23<sup>rd</sup> March 2016,pp. 500
- Presented a Paper titled “Segmentation and Classifications Of MRI Brain Images” in the National conference on Recent Issues in Network Galaxy-RING, organized by dept of CSE, R.M.D.Engineering college, 4<sup>th</sup> April 2017.
- Presented a Paper titled “Graph Inference based Information Retrieval for Sports Domain” in the 1<sup>st</sup> National conference on Recent Advances in materials Science and Nanotechnology (RAMN-2017) at Academy of Maritime Education and Training (AMET) on 26- 27<sup>th</sup> May 2017 and has been published in the proceedings ISBN:978-81-89843-85-4.PP-14.
- Presented a Paper titled “Mobility Platform for Physically Handicapped and Senior Citizens using Wireless Sensor Networks” in the International conference on Advancements in Science, Engineering and Technology (ICASET '18), held at M.P.Nachimuthu M.Jaganathan Engineering College on 28<sup>th</sup> March 2018.
- Presented a Paper titled “Mobility Platform for Physically Handicapped using Wireless Sensor Network” in the International conference on Advanced Information and Communication Technology (ICAIC-'18), held at KARPAGAM College of Engineering during 8<sup>th</sup> and 9<sup>th</sup> March 2018.
- Presented a Paper titled,”Diagnosing Stealth Dyslexia Using Artificial Neural Networks”, Research Conference on Data & Decision Science (RCDDS'18) – Organised by Dept of CSE,Sri Sai Ram Engineering College at SRM Institute of Science and Technology Chennai on 4<sup>th</sup> and 5<sup>th</sup> May 2018.
- Presented a Paper titled, ” Energy Theft Detection in Multi Tenant Data Centres and Distribution line using Smart Grid”, National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Organized by Dept of CSE,Sri Sai Ram Engineering College Chennai on 27<sup>th</sup> March 2018.
- Presented a Paper titled, ” Evaluation of k-means and k\*-means Algorithm For Image Segmentation Prior to Classification “National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Organized by Dept of CSE,Sri Sai Ram Engineering College Chennai on 27<sup>th</sup> March 2018.
- Presented a Paper titled,” Logograph To Gesture Conversion For Speech And Hearing

Impairment” National Conference on Smart Innovations in Communications and Computing (NCSICC’18) – Organized by Dept of CSE,Sri Sai Ram Engineering College Chennai on 27th March 2018.

- Presented a Paper titled,” Peltier Based Energy Harvesting System” National Conference on Smart Innovations in Communications and Computing (NCSICC’18) – Organized by Dept of CSE,Sri Sai Ram Engineering College Chennai on 27th March 2018.
- Presented a Paper titled, “Mobility platform for physically Challenged and old people using wireless Sensor network”, National Conference on Smart Innovations in Communications and Computing (NCSICC’18) – Organized by Dept of CSE, Sri Sai Ram Engineering College Chennai on 27th March 2018.
- Presented a Paper titled” Diagnosing Stealth Dyslexia Using Artificial Neural Networks ”in the Research Conference on Data Decision Science-(RCDDS’18) 4<sup>th</sup> and 5<sup>th</sup> May 2018-Organised by SRM University and received the best paper award .
- Presented a Paper titled, **“Mobility Platform For Physically Handicapped And Senior Citizens Using Wireless Sensor Network** “International Conference On Advancements In Science, Engineering Technology- 2018(ICASET’18), Mpmnj Engineering College Chennimalai, On 28<sup>th</sup> March 2018
- Presented a Paper titled, **“Flood Susceptibility Prediction using LSTM Algorithm** “ in the 3rd International Conference on Advances in Computing Technology - Raja Rajeswari Engineering College,bangalore 18<sup>th</sup> June 2020 and 19<sup>th</sup> June 2020
- Presented a Paper titled, **“Smart Water Irrigation System Using IoT** “ in the 3rd International Conference on Advances in Computing Technology - Raja Rajeswari Engineering College,bangalore 18<sup>th</sup> June 2020 and 19<sup>th</sup> June 2020
- Presented Paper on PD Pattern Recognition on Transmission Lines Using Tree-Based Models" in the IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS'20) Organised by Sri Sairam Engineering college between December10 and December 11,2020.
- Presented Paper on "Real Time Path Planning Using Intelligent Transportation System for Hybrid VANET" in the IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS'20) Organised by Sri Sairam Engineering college between December10 and December 11,2020.



## **COURSERA COURSES COMPLETED**

1. Text Retrieval and Search Engines, University of Illinois at Urbana-Champaign, Completed on May 11, 2020.
2. Introduction to Google Docs Coursera Project Network Completed on May 14, 2020.
3. Spreadsheets for Beginners using Google Sheets Coursera Project Network Completed on May 14, 2020.
4. Introduction to Big Data, University of California San Diego, Completed on May 14, 2020.
5. Support Vector Machines with scikit-learn, Coursera Project Network, Completed on May 20, 2020.
6. Introduction to HTML5, University of Michigan, Completed on May 20, 2020.
7. Building Basic Relational Databases in SQL Server Management Studio, Coursera Project Network, Completed on May 20, 2020.
8. AI For Everyone, deeplearning.ai, Completed on May 21, 2020.
9. Perform Sentiment Analysis with scikit-learn, Coursera Project Network, Completed on May 21, 2020.
10. Machine Learning for All, University of London, Completed on May 21, 2020.
11. COVID19 Data Analysis Using Python, Coursera Project Network, Completed on June 7, 2020.
12. Programming for Everybody (Getting Started with Python), University of Michigan, Completed on June 8, 2020
13. The Sustainable Development Goals – A global, transdisciplinary vision for the future, University of Copenhagen, Completed on June 21, 2020.
14. Introduction to Relational Database and SQL, Coursera Project Network, Completed on July 28, 2020
15. Cybersecurity and the Internet of Things, University System of Georgia, Completed on August 1, 2020.
16. Machine Learning: Regression, Completed on June 21, 2020.

## REVIEWER DETAILS

Evaluated a book chapter manuscript, "A deep learning based framework for accurate facial ethnicity classification and efficient query retrieval", for publication in Deep Learning-Based Image Analysis Under Constrained and Unconstrained Environments in IGI Global.

### Reviewer in

- The Journal of Supercomputing.
- Computer Communications
- Journal of Medical Systems
- TPC Member during the International Conference on “Machine Intelligence and Data Science Applications (MIDAS-2020)” in association with Next Generation Computing Technology (NGCT) Society held on 4th-5th September 2020 at University of Petroleum and Energy Studies, Dehradun, Uttarakhand

### DC MEMBER

Part Time Research Scholar Mr.Inbaskaran .G (PA2133013013009) at SRM Institute of Science and Technology

## FUNDED PROJECT DETAILS

S.No	Project Title	Funding Agency	Amount	Status
1	BLUSAV Wearable Security System	IEDC	Rs.1,00,000	Completed
2	Biogas Plant an Alternative Source of Energy for Better Life	UBA	Rs.1,00,000	Applied
3	Smart Farming with Sensor Networks and Smart Phone	NIDHI – PRAYAS program –DST	Rs.3,96,000	Applied
4	MODROB	AICTE	Rs.19.67,000	Applied
5	(i)Early Stage Cancer Detection Handling with GSR (ii)Automated Text Detection,Extraction and Sharing Using OCR and QR Technology (iii)Mid-Day Meal Scheme	TNSCST	30000	Applied