

Sri Sai Ram Engineering College

Department Of Humanities And Sciences

Name: Dr S.K.UmaMaheswaran				
Designation:	Professor			
Qualification:	M.Sc.(Mathematics), MPhil.(Mathematics), BE.d (Teaching and Learning) Ph.D (AI Applications-Design of Expert system), LMISTE(Life member of Indian society for Technical Education LMIMA (Life member of Indian Mathematical Association)			
Area of specialization:	Statistics (Mathematics), Applied Mathematics, Artificial Intelligence, Expert System, Healthcare AI, Knowledge based System			
Experience:	Industrial Experience		Teaching Experience	
	-		29 Years	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	7		4	
Publications:	Conference		Journal	
	National	International	National	International
	4	11	4	6

Patents:	National	International
	1 (Design) Granted	NIL

Honours and Awards		
	1) Perennial Fund & Best Contribution Institution UBA- 2022	UBA NCI - IITD
	2) Arivial Kalanjiyam Award 2017	MTS Academy, Chennai
	3) Best Professor Mathematics-Engineering Colleges Chennai -2012	Education Today
	4) Best NSS Program Officer Award -2010	Anna University, Chennai
	5) Best NSS Unit Award – 2011	Anna University, Chennai
	6) Best Motivating Teacher – 2010	Lions Club of Chennai Metropolitan South
	7) Teacher of the Year - 2000	Association of Mathematics Teachers of India

Institution Responsibilities		
	1) National Service Scheme (NSS) 1998 – 2018 (20 Years)	Coordinator
	2) Unnat Bharat Abhiyan (UBA) 2018- 2023 (5 Years)	Coordinator
	3) IEEE – SSIT Society Student Branch From 2021	Chapter Advisor
	4) National Service Scheme (NSS) From 2024	Patron
	5) Students Graveness & Redressal Cell	Convener
	6) Students Discipline & Welfare Committee	Convener

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc.	Mathematics	1988	Thiagarajar College Madurai	Madurai Kamaraj University	74	I
PG	M.Sc.	Mathematics	1990	Thiagarajar College Madurai	Madurai Kamaraj University	81	I
	M.Phil.	Functional Analysis	1991	-	School of Mathematics, Madurai Kamaraj University	59	II
Ph.D.		AI Applications	2009	Faculty of Science & Humanities, Sathyabama University	Sathyabama University	-	-

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Madurai Kamarajar University College, Madurai.	Lecturer	1994	1996	2	-	-
Sri Sairam Engineering College, Chennai	Lecturer	12.8.1996	2001	5	-	-
	Sr. Lecturer	2001	2005	4	-	-
	Asst. Professor	2005	2009	4	-	-
	Professor	2009	TILL	14	-	-
Total				29	-	-

Membership in Professional Bodies:

<p style="text-align: center;">Academic</p>	<ol style="list-style-type: none">1) Life member of Indian Society for Technical Education (LMISTE)2) Life Member of Ramanujan Mathematical Society (LMRMS)3) Life member of Indian Mathematical Association (LMIMA)4) Life member of Association of Mathematics teachers of India5) Non Scientific member of International Institute of Biotechnology & Toxicology (IIBAT)
<p style="text-align: center;">Technical</p>	<ol style="list-style-type: none">1) IEEE professional membership – Senior Member2) IEEE Society on Social Implications of Technology – SSIT-Advisor Student Branch SEC3) IEEE Robotics & Automation Society4) IEEE Photonics Society5) IEEE Electron Devices Society6) IEEE Industrial Electronics Society7) IEEE – SIGHT8) IEEE Young Professionals9) IEEE Council on Electronic Design Automation10) IEEE Nanotechnology Council11) IEEE Systems Council12) IEEE Transportation Electrification Council13) IEEE Climate Change Technical Community14) IEEE Pre-University STEM Community15) IEEE Smart Cities Community16) IEEE Public Safety Technology Community17) IEEE Computer Society Technical Community on, Mathematical Foundations of Computing

Patent:

- 1) Design : “Solar Powered Cold Room”, Design Number 351819-001, Granted, 04/01/2023 in the name of Dr. S.K.UmaMaheswaran, Dr. T Vennila, Mr. M.Meiyathan, Mr. Aniruth Srinivas vellimedu.

Funded Projects :

SI No	Title of the Project	Organization	Amount of the Grant	Status
1	Hygiene Hydro (Water RO)	IEEE – SIGHT	4000 USD	Completed
2	Application for the Detection of Cataract and Glaucoma for Rural Population Using Machine Learning	UBA IITD – SEG	Rs.50,000	Completed
3	IOT based Smart Assistant Cane for the Visually Impaired.	EPICS in IEEE	750 USD	In Progress
4	Smart Outdoor Wheel Chair using IOT for the Paralyzed	EPICS in IEEE	900 USD	In Progress
5	Smart fall Detection tiles for Disabled People	EPICS in IEEE	1300 USD	In Progress
6	Artificial Robotic Material Arm	EPICS in IEEE	1150 USD	In Progress

PUBLICATIONS

Journal:

1. Umamaheswaran S K, Meenatchi Sundaram M and Rajasekaran S. 'A study on controlling Hospital acquired Infections: A knowledge based system approach', (2007). Information Technology Journal, Vol.6, No.1, pp.129-134.
2. Umamaheswaran S K and Rajasekaran S. 'Framework for developing Infection Control Surveillance: A knowledge discovery approach' (2007). The Icfai Journal of Systems management, Vol.5, No.3, pp.48-61.
3. Umamaheswaran,S.K., 'Knowledge based fault diagnosis system for sensor fault detection and isolation of industrial plants'(2010). International journal of applied mathematics, Vol.23, No.1, pp.43-53.
4. Umamaheswaran.S.K., 'Statistical process control analysis for monitoring dangerous hospital acquired infections',(2009). International journal of pure and applied mathematics.Vol.57, No.4, pp.593-603.
5. Umamaheswaran.S.K., Framework for developing an Expert System for car fault diagnosis.(2009). Journal on future engineering and technology. Vol.5,. No.2, pp.17-24.
6. Umamaheswaran.S.K., Online fault deduction and isolation of industrial plants- An algebraic and artificial intelligence analysis.(2010). International journal of design and manufacturing technologies. Vol.4, No.1, pp.47-56.

Conferences:

1. Umamaheswaran S K and Rajasekaran S. 'Monitoring Dangerous Nosocomial Infection: A knowledge based Expert System approach' (2006), Proceedings of first International Conference on Frontier Technologies - Need for the Industry, Business and education'. ISTE. Adhiyamaan College of Engineering, Hosur, pp.179-184.
2. Umamaheswaran S K and Rajasekaran S. 'An Artificial Intelligence approach for developing Infection Control Surveillance System'(2006). Proceedings of IEEE National Conference on Information Communication Conversance, B.S. Abdur Rahman Crescent Engineering College, Chennai, pp.84-93.
3. Umamaheswaran S K and Rajasekaran S, 'Design of Expert System for Antibiotic Resistance for Controlling hospital acquired Infections'(2006). Proceedings of National Conference of Emerging Technologies & applications Computer Science Department of Saurashtra University, Rajkot, pp.127-134.
4. Umamaheswaran S K and Rajasekaran S, 'Statistical process control – A tool for quality improvement' (2009).International conference on Digital Factory (2008), CIT, Coimbatore. Pp. 1232-1239.
5. Umamaheswaran SK, KK Ramachandran, et.al., "The Critical Understanding on the Emerging Threats and Defensive Aspects in Cryptocurrencies using Machine Learning Techniques"(2022). 2nd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE). Pp 1938-1942

6. Umamaheswaran SK, S Deivasigamani, Joshi K, “Computational Intelligence Approach to Improve The Classification Accuracy of Brain Tumor Detection”(2022). 11th International Conference on System Modeling & Advancement in Research Trends. Pp. 1192-1196
7. SK UmaMaheswaran, Vinay Kumar Nassa, Bhaskar Pratap Singh, “An Inventory System Utilizing Neural Network in The Prediction of Machine Learning Techniques”(2022). 2nd International Conference on Advance Computing and Innovative Technologies in Engineering” pp.1087-1091
8. Mohseena Thaseen, SK UmaMaheswaran, Darshana A Naik, “A Review of Using CNN Approach for Lung Cancer Detection Through Machine Learning”(2022). 2nd International Conference on Advance Computing and Innovative Technologies in Engineering.pp. 1236-1239.
9. SK UmaMaheswaran, NK Munagala, D Mishra,” The role of implementing Machine Learning approaches in enhancing the effectiveness of HealthCare service” (2022). 2nd International Conference on Advance Computing and Innovative Technologies in Engineering. Pp. 1922-1926

Workshop:

1. Attended ten day workshop on “Graph Theory and Neural work” organized by Department of Mathematics & Computer Application, Sri Venkateshwara College of Engineering, Sri perumpadur, Chennai during March 2001.
2. “One Day Orientation workshop for NSS Program Officers” Organized by Anna University, Chennai on 8th June 2019
3. Attended two days National workshop on “Socially Relevant Technical Education : Exploring Cooperation Oriented Action” Organized by IIIT Sri City Chittoor & NITTTR Chennai on 6th Dec 2019 & 7th Dec 2019
4. Attended one day workshop on “Regional Workshop for the Orientation of Participating Institute to Initiate work in the Adopted village Clusters” Organized by MHRD & SRM Institute of Science and Technology on 25th Jan 2020
5. One Day Orientation workshop for NSS Program Officers” Organized by Anna University, Chennai on 5th March 2020
6. Attended one day workshop on “Launching a New framework of UBA 2.0 & Orientation Workshop” Organized by IIT Delhi & MHRD on 25th April 2020
7. Attended one day workshop on “Planning of UBA activities in Village Clusters adapted by Participating Institutes” Organized by MHRD & IIT Madras on 6th Aug 2020

Online Course:

1. Course titled “Statistics for Data Science and Business Analysis” offered by (Udemy) 22.11.2019
2. Course titled “Statistics Made Easy by Example for Analytic /Data Science” offered by (Udemy) 15.12.2019
3. Course titled “Business Analytics for Decision Making” offered by University of Colorado (Coursera), 13.05.2020

4. Course titled “The Sustainable Development Goals- A global, transdisciplinary vision for the future offered by (Coursera), University of Copenhagen 16.05.2020
5. Course titled “AI for Everyone” offered by (Coursera), deeplearning.ai 22.05.2020
6. Course titled “Deep Learning for Business” offered by (Coursera), Yonsei University 29.05.2020
7. Course titled “Structuring Machine Learning Projects” offered by (Coursera), deeplearning.ai 28.05.2020
8. Course titled “Introduction to Search Engine Optimization” offered by (Coursera), University of California Davis 02.06.2020
9. Course titled “Leadership And Emotional Intelligence” offered by (Coursera), Indian Business School 03.06.2020
10. Course titled “Introduction to Cloud Identity” offered by Google Cloud 06.06.2020