RESUME

Dr. SASI GOPALAN

Permanent address	Present Address	Official Address
Ethylil House Vrindavan Road NearKSRTC, Prumbavoor Ernakulum District Kerala	Teachers Quarters, Type-C, Unit no.3 CUSAT ,Kochi-22 Kerala	Professor & Head Department of mathematics, Cochin University of Science and Technology Kochi-22, Kerala India
Email		sasigopalan@cusat.ac.in
Contact		9495363385 9447581211

Educational Qualifications

Name of the degree	Degree Awarded
MSc	CUSAT,1993
MPhil	CUSAT,1994
PhD	M.G University Kottayam,2010

Teaching Experience

Position	Institution	Experience
Assistant Professor	Institution of Human resource Development (IHRD)	1996
Senior Scale	School of Engineering, CUSAT	2003
Reader	School of Engineering, CUSAT	2006
Associate Professor	School of Engineering, CUSAT	2009
Professor	School of Engineering, CUSAT	2012
Professor	Department of Mathematics, CUSAT	2019- onwards
Total Number of Teaching Experience		25 years

Research & Project Experience

Sl.No	Experience	Department	Year
1	Research	Department of Mathematics, CUSAT	2012 onwards
2	Completed a major Research project In the field of Applied Mathematics.	Funded by Department of Science & Technology, New Delhi	2012-2014

Administrative Experiences

Sl No	Name of the Body	Duration	Year
1	Member Syndicate, CUSAT	4 years	February, 2019 onwards
2	Head, Department of Mathematics, CUSAT	3 years	June 2021 onwards
3	Head, Division of Applied Sciences & Humanities, SOE, CUSAT	2 years	2013-2015, 2016-2018

Membership in Various Bodies

Sl.No	Name	Duration	Year
1	Served as Member to Senate, CUSAT	4 years	2007-2011, 2011-2015 & 2019 0nwards
2	Chairman Board Studies in Mathematics, CUSAT	4 years	2021onwards
3	Member Kerala mathematical Association	Life Member	
4	Convener, Student Empowerment Committee, TEQIP Phase II, SOE, CUSAT	3 years	2012-2015
5	Member Standing Committee for the welfare of SC/ST, CUSAT	2 years	2009-2011,2011 to till date
6	Member CAT Monitoring Committee, CUSAT	2 years	2009-2011 & 2020 onwards

Other Responsibilities

Sl. No		
1	Coordinator, Equal Opportunity, CUSAT (UGC funded)	2009 onwards
2	Coordinator, Skill Orientation Centre for Engineering, CUSAT (AICTE funded)	2019 onwards
3	Chief Warden, Central office, University Hostels, CUSAT	2018-2019
4	Assistant Warden, Sagar Hostel	2007-2014

Publications

(a) International Referred Journals

[1] Linu Pinto, Dr.Sasi Gopalan, Dr. P. Balasubramanyam, On the Stability and Generalization of Neural Networks with VC Dimension and Fuzzy Feature Encoders, Journal of the Franklin Institute , Elsevier (2021)

[2] Suja C Nair, Sudeep Elayidom M, Dr.Sasi Gopalan, Call detail record-based traffic density analysis using global K-means clustering, IJIE(Inderscience) (2020)

[3] Dr. Sasi Gopalan, Anju S Mattam, Rough Approximate operators based on fuzzy soft relation, Italian journal of pure and applied mathematics,(2020)

[4] Dr. Sasi Gopalan, Anju S Mattam, Algorithm to compute Transitive closure of fuzzy soft relation, Journal of Mathematical and Computational Science,(2020)

[5] Viji Gopal,M Sudheep Elayidom,Varghese Paul,Sasi Gopalan, An Encryption based Security Enhancer Tool for IaaS Applications in Cloud Computing, IEEE International conference RTEICT '18

[6] Anju S Mattom, Dr.Sasi Gopalan, Algorithm to compute transitive closure of fuzzy soft relation, Journal of Mathematical and Computational Science (2019)

[7] Suja C Nair C Nair, Dr. Sudheep Elayidom M Elayidom M and Dr. Sasi Gopalan Gopalan, KM-MBFO: A Hybrid Hadoop Map Reduce Approach for Clustering Big Data by Adopting Modified Bacterial Foraging Optimization Algorithm, International Journal of Recent Technology and Engineering.(2019)

[8] Linu Pinto; Sasi Gopalan; S. Sundararajan, VC Dimension Based Fuzzy Sigmoid Neural Network (VC-FSNN), IEEE Intelligent systems proceedings, (2019)

[9] Femi N.S, Dr.Sasi Gopalan, A mathematical Analysis of Topology Optimization in 3D printing, International Journal of Applied Engineering Research (IJAER), (2018)

[10] Linu Pinto, Sasi Gopalan, General Standard Sigmoid Networks and predictive modeling Elucidation through VC Dimension, International Journal of Applied Engineering Research(IJAER), (2018)

[11] Nisha A.B , Sasi Gopalan, Meddle Detection Based on Morphological Opening, International Journal of Applied Engineering Research(IJAER)

[12] Suja C Nair, Dr.M Sudheep Elayidom, Dr. Sasi Gopalan, Attribute Based Hierarchical clustering Algorithm for Traffic Density Analysis, International Journal of Applied Engineering Research(IJAER), 2018

[13] Anju S Mattom, Sasi Gopalan, Algebraic Structure of Fuzzy Soft Sets, International Journal of Applied Engineering Research (IJAER), 2018

[14] Dr. Sasi Gopalan, Cindrella T.J, Introduction to Balanced Hypercubes, International Conference on Science & Technology (ICST2018) Conference Proceeding(2018)

[15] Anju.S.Mattom and Sasi Gopalan, Product of Fuzzy Soft Groups, Advances in Fuzzy Mathematics, 2017

[16] Nish A.B, Dr.Sasi Gopalan, Interpose detection Using Complete Lattice Approach of Mathematical Morphology, International Journal of Pure and Applied Mathematics,(2017)

[17] Suja C Nair , Sudeep Elayidom and Sasi Gopalan, Impact of CDR Data Analysis using Big Data Technologies for the Public: an Analysis, International conference on Advanced Computing and Communication systems IEEE X-plore paper, 2017

[18] Sasi Gopalan,Linu Pinto,S.Sunderarajan , Mathematical Model Kernel Support Vector Machine of Adaptive Neuro Fuzzy System, Science and Knowledge Research Society, May 2017.

[19] Savitha. K.N and Sasi Gopalan,A Mathematical Model for the Approximations of Signals using Haar Wavelet Transforms, ICMMCMSE, February 2017.

[20] Suja C Nair , Sudeep Elayidom and Sasi Gopalan, Design and Implementation of Traffic Analysis and Prediction system using CDR Data, International Journal of Advanced Scientific Research and Management(IJASRM),2017

[21] Dr.Sasi Gopalan and Linu Pinto, Evenness in Women Employment Based on ICT-A measure based on Data Mining, Journal of Women Empowerment and Technology (WET),2016

[22] Dr.Sasi Gopalan, Linu Pinto , Sheela.C, Arun Kumar, Function Approximation with deep Neural   Network for image classification In Fuzzy Domain, AIP Conference Proceedings, 2016

[23] Dr.Sasi Gopalan and Linu Pinto, A Mathematical Model of Neuro Fuzzy Approximation in image Classification, AIP Conference Proceedings, 2016

[24] Nisha A B, Dr.Sasigopalan, Approximations in Mathematical Morphology and Rough Sets, International Advanced Research Journal in Science, Engineering and Technology,2015

[25] Sasi Gopalan, Arathi .S, New mathematical Model in Image Enhancement Problem, Proceedia Computer Science, Elsevier, 2015

[26] Sasi Gopalan, Neethu Mohandas, Sudeep Elayidom , Leveraging Cloud for Large Scale Business Transactions – A Survey, International Journal of Advanced research in Computer and Communication engineering, June 2015.

[27] Sasi Gopalan and Anju.S.Mattom, Factor Group of a Fuzzy Soft Group, International Organization of Scientific Research Journels,Vol.10,Issue 3,May-June 2014.

[28] Sasi Gopalan, C.Sheela, Madhu. S. Nair , and Souriar Sebastian, Fuzzy Lattice and Function Approximation in Image Processing, Int.J.Intelligent Systems Technologies and Applications (2011)

[29] Sasi Gopalan, Souriar Sebastian and C. Sheela, Modified Fuzzy Basis Function and Function Approximation, Journal of Computer & Mathematical Sciences, J.Comp & Math. Sci. Vol 1 (2) , 263-273 (2010)

[30] Sasi Gopalan, Madhu. S. Nair , Souriar Sebastian and C.Sheela, Approximation Studies Using Fuzzy Logic in Image Denoising Process,ICLICC,113-120, Springer (2010).

[31] Sasi Gopalan, Madhu. S. Nair and Souriar Sebastian, Approximation Studies on Image Enhancement Using Fuzzy Technique, International Journal of Advanced Science and Technology, Vol.10,11-26,September ,2009.

(b) National Level Presentations

[1] Sasi Gopalan, Souriar Sebastian and C. Sheela,A study of Approximation in Fuzzy Systems, Proceedings of the National Seminar on Discrete And Fuzzy Mathematics And Their Applications in Engineering and Technology Sponsored by AICTE,DST,CSIR & Annual Conference of Kerala Mathematical Association , Febuary,2007.

[2] Sasi Gopalan, Souriar Sebastian, Fuzzy Hypercube: A Possibilistic Study in Approximation, Proceedings of the National Conference on Recent Developments and Applications of Probability Theory, Random Process and Random Variables in Computer Science, Sponsored by AICTE , Tiruvalla (MACFAST), August,2008.

[3] Sasi Gopalan, C. Sheela and Souriar Sebastian, Function Approximation Based on Fuzzy Gradient Filter from Colour Image Enhancement, Proceedings of the UGC sponsored National Seminar on Recent Trends In Fuzzy and Discrete Mathematics, UC College Aluva, November 2009.

[4] Sasi Gopalan, Function Approximation using Fuzzy Image Processing, ISTE Short Term Training Programme organized at school of engineering , CUSAT,Kochi-22,December,2010.

[5] Sasi Gopalan, Fuzzy Mathematics and image processing , Proceedings of International Seminar on New Trends in Application of Mathematics, Barath Matha College,January,2011.

[6] Sasi Gopalan "Image Processing & Mathematical Modeling", Proceedings of UGC Sponsored National Conference "Some Recent Developments in Mathematics and their Application in Image Processing & Medical Diagnosis", St.Albert's College, Ernakulum, April 2013.

Invited Talk Delivered

1. Faculty Development Programme on Capacity enhancement Training for Staff Advisors, College of Engineering ,Trivandrum

2. Mathematics Teachers Training Programme (MTTP-2018), MES College, Nedumkandam, Kerala, India

3. TEQIP- short term training programme conducted by Division of Mechanical Engineering, School of Engineering, CUSAT

4. UGC sponsored National Conference at St. Albert's College, Ernakulum

5. International Conference at Gandhi gram Rural University,Tamilnadu

6. International Conference at Bharat Matha College, Trikkakara,Kochi

7. Short-term training programme at Rajiv Gandhi Institute of Technology,Kottayam

8. Post Graduate Enrichment Programme , Federal Institute of Science & Technology,Angamali , Kerala

9. ISTE short term training programme conducted by Division of Electronics, School of Engineering, CUSAT

10. UGC Sponsored National Conference on Recent Trends in Fuzzy and Discrete Mathematics, Union Christian College, Aluva, Kerala, India

Programmes Organized for the benefit of for deprived groups (As per UGC/ AICTE Norms)

Sl.No	Course	Venue	Period
1	Remedial Coaching	CUSAT	2007-Onwards
2	Soft skills & Career Development Progrmmes	CUSAT	2007-Onwards
3	Three days Orientation Programme for 1st Year Btech degree students of SOE Jointly with TEQIP Phase-II & PTA SOE	CUSAT	2012-2013 2013-2014 & 2014-2015

4	Organized state level One-day workshop on Quality & Employability On Engineering Education jointly with Institute for Advancement in Society (ISA), Trivandrum & EOC, CUSAT.	Electronics Auditorium, CUSAT	May 2013
5	Organized 6 days workshop for I Year SC/ST BTech degree students of Kerala jointly with Centre for research & Education for social reformation (CREST),Calicut & EOC,CUSAT .	CUSAT Seminar Complex	December 18-23,2014
6	Started UGC sponsored NET coaching for SC/ST students in CUSAT, jointly with EOC & Employment Guidance Bureau, CUSAT (2 batches per year)	& Employment Guidance Bureau, CUSAT	October,2014 – onwards
7	Conducted Two weeks National Level Capacity building Programme for faculty members, sponsored by ICSSR, Govt.of India.	CUSAT	March 2015
8	Conducted one week training programme for College / University teachers Under TEQIP II	CUSAT	2016
8	Conducted Soft Skill and personality development programme for academically weak students.	CUSAT	January – February 2018
9	Coordinated Skill development programme for PLUS one SC/ST Students of Kochi Corporation	CUSAT Seminar Complex	10-12 , November 2018
10	Coordinated Skill development programme for PLUS one SC/ST Students of Kochi Corporation	CUSAT Seminar Complex	11-13 , January, 2018
11	Organized International Conference	CUSAT Seminar Complex	23-25 April 2018
12	One day workshop on "Non-Parametric Test using SPSS " for PhD /, M.Phil & Research Scholars in School of Marine Sciences	Computer Lab , Department of Marine Biology	07.04.2018
13	Workshop on Skill Development and Computer Programming	Computer Lab , MCA	2.10.2019-4.102019
14	Workshop on communicative English	Seminar Complex CUSAT	31.08.2019
15	Workshop on C++	Computer Lab, Department of Computer Application	11.10.2019
16	Orientation to Excel	Computer Lab, Department of Computer Application	26.10.2019

17	Personality development programme	Computer Lab, Department of Computer Application	26.10.2019
18	Web Designing	Equal Opportunity Cell	During September October , November
19	Special remedial Coaching Classes for Engineering Mathematics	Equal Opportunity Cell	Holidays
20	Special remedial Coaching Classes for Engineering Mechanics	School of Engineering	(During November and December)
21	Conducted webinar on Educational concessions an Career Orientation	Online	26.03.2021
22	4 days Workshop for Soft Skills Development for SC/ST Engineering students	Online	20, 21 , 27,28 March 2021

Countries Visited

Sl.No	Country	Year	Purpose of the Visit
1	Greece, Europe	2015	Academic
2	Malaysia	2017	Academic
3	Singapore	2017	Academic
4	Portugal, Europe	2018	Academic
5	Dubai	2019	Official

Achievements

- Coordinated many social activities with the help of students & faculty through Equal Opportunity Cell, CUSAT

- Through EOC & SOCE, CUSAT helped Students for their self-employment through startup (by registering company).