

## **BIODATA**

Dr. SASI GOPALAN

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**Religion** : Hindu  
**State** : Kerala  
**Nationality** : India

### **Educational Qualifications**

Sl.No	Programme	Topic	Degree Awarded
1	MSc	Mathematics	CUSAT,1993
2	MPhil	Mathematics	CUSAT,1994
3	PhD in Mathematics	A Study of Approximation Using Fuzzy Techniques	M.G University Kottayam,2010

### **Teaching Experience**

Position	Institution	Experience
Lecturer	Institution of Human resource Development (IHRD)	1996-2003(7 years)
Lecturer Senior Scale	School of Engineering, Cochin University of Science & Technology (CUSAT)	2003
Reader	School of Engineering, Cochin University of Science & Technology (CUSAT)	2006
Associate Professor	School of Engineering, Cochin University of Science & Technology (CUSAT)	2009
Professor	School of Engineering, Cochin University of Science & Technology (CUSAT)	2012 to 2019

Professor (New Posting)	Department of Mathematics, Cochin University of Science & Technology (CUSAT)	2019 onwards
Total Teaching Experience		28 years

### Funded Project

Sl.No	Experience	Funding Agency	Year
1	Equal Opportunity Cell, CUSAT	University Grantz Commission	2009 onwards
2	Completed a major Research project In the field of Applied Mathematics.	Department of Science & Technology, New Delhi	2012-2014
3	Completed Skill Orientation Centre for Engineering, CUSAT	All India Council for Technical Education	2019
4	Completed Startup Project	Kerala Water Authority, Government of Kerala	2023

### PhD Guidance

Sl.No	Name of PhD Student	Reg. No & Topic	Awarded/ Still working
1	Linu Pinto , Mathematics, Department of Mathematics, CUSAT	5105 An Analytical Approach on the Approximations of Deep Neural Network for Classification Functions in Fuzzy Domain .	Awarded, 2021
2	Anju S Mattom , Mathematics, Department of Mathematics, CUSAT	4558 Rough Approximation of Fuzzy Soft Sets Based Fuzzy Soft Relation.	Awarded, 2022
3	Nisha A B , Mathematics, Department of Mathematics, CUSAT	4557 Morphological Nearness and Approximations in Mathematical Morphology.	Awarded, 2022
4	Suja C Nair (Co-Guideship), Computer Science, School of Engineering, CUSAT	5114 Design and Implementation Efficient Data Mining Models Using CDR Data for Density Analysis and Prediction.	Awarded, 2022
5	Femy N S, Mathematics, Department of Mathematics, CUSAT	5399 Advances in Predictive Mathematical Models for Time-Series Data Analysis Using Self Organizing Maps and Fuzzy Logic.	Awarded, 2023

6	Savitha K N, Mathematics, Department of Mathematics, CUSAT	Fourier and Wavelet Analysis on the Equivalence class of Normalization Function for Data Processing in AI Models.	Awarded, 2023
7	Viji Gopal (Co- Guideship), Information Technology, School of Engineering, CUSAT	5153 Secure Context based Searching in Hybrid Clouds Using Ontology based indices.	Thesis Submitted
8	Samburaj P R, Mathematics, Department of Mathematics, CUSAT	Analysis and Approximations in Fractional Calculus	Under Pre-submission Process
9	Anupriya C S, Mathematics, Department of Mathematics, CUSAT	Application of Fuzzy Algebra to Automata Theory	Under Pre-submission Process

#### Mentor on Industry sponsored Consultancy Post Doc Fellowship (Ongoing)

Sl. No	Name of the Candidate	Topic
1	Dr. Adhira Balan	Optimized Forecasting Algorithm using Quantum Computing
2	Dr. Manoj Kumar Mandal	Optimized Pricing Algorithm using Quantum Computing

#### Mentor on Industry – Academia Collaboration Earn While You Learn Project for UG & PG students (Ongoing)

Sl. No	Name of Batch	Topic
1	Batch 1 (Six numbers of UG & PG students)	Code Rewriting and Optimizing into a new age Technologies
2	Batch 2 (Six numbers of UG & PG students)	AI – ML Data Analytics Project

#### Paper Presentation/ Invited Speaker

Sl.No	Title	National/ International	Place	Year
1	Support Vector Space And Kernal Optimization for	Invited Speaker: International Conference	Sree Eswar College of Engineering, Coimbatore, Tamil Nadu	January 6-7, 2017

	Image Classification			
2	Function Approximation Based on Fuzzy Gradient Filter from Color Image Enhancement.	Invited Speaker: National Conference	Union Christian College, Aluva	November 19-21,2009
3	Basics Of Fuzzy Mathematics	Invited Speaker: Annual Conference, ICMA	Federal Institute of Science and Technology	February 22-24, 2007
4	Fuzzy Hypercube: A possibilistic and approximation	Invited Speaker: National Conference	Mar Athanasious College For Advanced studies, Thiruvalla	27-29, 2008
5	Approximation studies using Fuzzy Logic in Image Denoising process	Invited Speaker: International Conference	Gandhigram Rural Institute- Deemed University, Tamilnadu	February 25-27, 2011
6	A study of Approximation in Fuzzy Systems	Invited Speaker: National Conference	Federal Institute of Science and Technology,	February 22-24, 2007
7	A mathematical model for the approximations of Signals using HAAR Wavelet Transform	Invited Speaker: International Conference on mathematical Modelling and Computational Methods in Science and Engineering	SOE, CUSAT	Feb 2017
8	Role of wavelets in a system matrix for the perfect reconstitution of a signal	Invited Speaker: International conference on Mathematical Modelling and Scientific Computing	Gandigram Rural Institute, Tamil Nadu	February 2020

9	Fuzzy mathematics	Invited Speaker: National seminar on Recent trends in Applicational mathematics	Vidya Academy of Science and Technology, Thrissur Kerala	April 2007
10	Transform Techniques	Invited talk State level work shop	St. Xavier's college For Women, Aluva.	January 2023
11	Introduction to Optimization Technique	Invited Talk	St. Paul's College, Kalamassery, Kerala	July, 2022
12	Mathematics in Machine Learning and Data Analysis	Invited Talk - International conference on mathematical modelling Applied Analysis and Computational Intelligence	Gandhigram Rural Institute, tamil Nadu	March 2022
13	Mathematical methods of transform Techniques	Invited talk- DST- SERB Sponsored International Conference on the Recent Trends in Applications of mathematics	Federal Institute of Science and Technology, Angamaly, Kerala	February 2023
14	Multiblock transformer for Malayalam Language modelling	Paper Presentation International Conference on Artificial Intelligence and Software engineering	CUSAT, Kochi-22	March 2023
15	Evenness in Women Employment Based On ICT- A measure based on Data Mining	Paper Presentation International Seminar Women Studies	CUSAT	October, 2015
16	Fuzzy Image processing	International Conference: Keynote Speaker	Gandhigram Rural University, Tamilnadu	2011

17	Applications of Fuzzy Logic and Image Processing	Invited talk: International Conference	Bharat Mata College, Thrikkakara, Kochi	2011
18	Mathematical Modelling	Invited talk: Mathematical Teachers Training programme-2018	MES College, Nedumkandam	2018
19	Mathematical Modelling	Invited talk: Faculty development programme on Capacity enhancement Training for Staff Advisors	College of Engineering, Trivandrum	2018
20	Mathematical Models and Approximations	Invited talk: Short term training Programme on " mathematical models in data mining process"	Division of Applied Sciences and Humanities	2016
21	Optimization Techniques	Invited Talk: TEQIP- short term training programme "Numerical Methods for Engineers"	Division of Mechanical Engineering, School of Engineering, CUSAT	2014
22	Image Processing and mathematical modelling	Keynote Speaker: UGC sponsored National Conference "Some Recent Developments in Mathematics and their Applications in Image Processing and Medical Diagnosis"	St. Albert's College, Ernakulam	2013
23	Fuzzy Models in image Processing	Short-term training programme Applied Mathematics for Engineers"	Rajiv Gandhi Institute of Technology, Kottayam	2011
24	Approximations and optimization	Invited Talk: "Post Graduate Enrichment Programme"	Federal Institute of Science & Technology, Angamaly, Kerala, India	2011
25	Modelling and optimization	Invited talk: ISTE short term training	Division of Electronics, School of Engineering, CUSAT	2010

		programme Modelling and optimization Techniques in Engineering" (MOTE)		
26	Optimal hardware generation for neural network acceleration	Paper Presentation: International Conference on Computations and data Science	IIT Roorkee	2024
27	Time Series forecasting using Neuro-fractal Interpolation Method	Paper Presentation: International Conference on Computations and data Science	IIT Roorkee	March 2024
28	Analyzing the impact of modulation transfer function (MTF) on computer vision: A multi-faceted exploration	Paper Presentation: International Conference on Computations and data Science	IIT Roorkee	2024
29	A new back propagation idea for optimizing the weights of a neural network with fractional calculus	Paper Presentation: International Conference on Computations and data Science	IIT Roorkee	2024
30	Computational Mathematics : A deep learning Approach	Invited Speaker:	Little Flower College of Arts and Science, Guruvayoor	14 <sup>th</sup> march ,2024
31	Neural Network Computations and optimizations	Invited Speaker	Farook College, Kozhikode	5th January, 2024
32	Neural Networks: Computations and optimization	Invited speaker	RSV College of Arts and Science, Coimbatore	2 <sup>nd</sup> February 2024

33	Introduction to Essential Computational tools for degree level students	Speaker	Tribal Arts and Science College, Idukki	24 <sup>th</sup> March 2024
34	Intermediate Computations of artificial Neural Network	Speaker; National workshop	CUSAT	22 <sup>nd</sup> December 2023
35	Neural Network for image processing	Invited Speaker	St Thomas college, Thrissur	December 7, 2023
36	Transformation and their Applications	Skill Development workshop	CUCEK, Kuttanad	November 18, 2022
37	Introduction to Essential Technology tools	Speaker	Munnar Engineering College	26 March 2023

### Member Academic Bodies

Sl.No	Position	Academic Body
1	Chairman	Board of Studies, Department of Mathematics, CUSAT
2	Member	Academic Council, CUSAT (2018-2026)
3	Convenor	Student Empowerment Committee TEQIP Phase III, SOE, CUSAT (2012)
4	Member	CAT Monitoring Committee, CUSAT
5	Member	Standing Committee for the welfare of SC/St in CUSAT
6	Member	Life Member, Kerala Mathematical association

### Administrative Experiences

Sl.No	Position	Year
1	Member to CUSAT Syndicate	2018-2022 2022 -2026



<b>2</b>	<b>Member to CUSAT Senate (16 years)</b>		<b>2006-2010</b> <b>2010-2014</b> <b>2018-2022</b> <b>2022-2026</b>
<b>3</b>	<b>Head Department of Mathematics, CUSAT</b>		<b>2021-2024</b>
<b>4</b>	<b>Head Division of Applied Science &amp; Humanities School of Engineering, CUSAT</b>		<b>2014-2016</b> <b>2016-2018</b>
<b>5</b>	<b>Assistant Warden</b>	<b>Sagar hostel for Boys</b>	<b>2007-2014</b>
<b>6</b>	<b>Coordinator</b>	<b>Equal Opportunity Cell, CUSAT</b>	<b>2009 onwards</b>
<b>7</b>	<b>Nodal Officer</b>	<b>UGC Cell for SC/ST CUSAT</b>	<b>2018 onwards</b>
<b>8</b>	<b>Chief warden</b>	<b>Central Office University Hostels, CUSAT</b>	<b>2018 -2019</b>
<b>9</b>	<b>Coordinator</b>	<b>Skill Orientation Centre for Engineering, CUSAT</b>	<b>2019-2022</b>

#### **Various Programmes Organized / Conducted**

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

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	& Employment Guidance Bureau, CUSAT	October,2014
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

**Examination/Evaluation duties done**

Sl.No	Institution	Duty
1	CUSAT	Chairman of centralized Valuation Camp of BTech degree, CUSAT
2	Gandhi gram Rural University, Dindigal, Tamil Nadu	Chairman for awarding PhD degree
3	MG University, Kottayam	Chairman for awarding PhD degree

### Conference Attended in National / International level conferences

Sl.No	Conference	Year
1	International Conference at Gandhi gram Rural University, Tamil Nadu	2011
2	International Conference on Information and Communication Techniques Under TEQIP-Phase II, SOE, CUSAT	Dec.2014
3	International Conference on Advances in Applicable mathematics, Barathiar University, Coimbatore.	November 2017
4	International conference on Information Science 2018, Portugal, Europe.	September 2018.

### Publications

- [1] Sambhu Raj P R, Sasi Gopalan, Sayooj Aby Jose, Criteria Analysis of Fractional derivative for Mathematical Modeling using CNR concept, Applied Mathematics E-Notes, ISSN 1607-2510, 2024 (accepted)
- [2] C. S. Anupriya, Sasi Gopalan, Mathematical Model Using Intuitionistic anti Fuzzy -Fuzzy combination Graph to manage Road Traffic networking, New Mathematics and Natural Computation, doi;10.1142S1793005726500079, 2024
- [3] Rohit T P, Sasi Gopalan, Varsha Shaheen, Multi Block Transformer for Malayalam Language Modeling, Journal of Artificial Intelligence & Cloud Computing. SRC/JAICC-243. DOI: doi.org/10.47363/JAICC/2024(3)228, 2024.
- [4] Femy N. S., Sasi Gopalan, Oscar Castillo, Mathematical Analysis of Self-Organizing Maps for Clustering, Intelligent Systems and Smart Infrastructure – Brijesh Mishra et al. (eds) © 2023 Taylor & Francis Group, London, ISBN 978-1-032-41287-0
- [5] Femy N. S., Sasi Gopalan, Oscar Castillo, Forecasting of COVID-19 Pandemic using a combined Hybrid approach of Fuzzy logic and n-BRM model, Special issue of Soft Computing (reviews completed).
- [6] Savitha K N, Sasi Gopalan, Linear Algebra Approach to Daubechies Wavelet Approximation, International Journal of Emerging Technologies and Innovative Research, ISSN:2349-5162, Vol.9, Issue 6, page no. ppc449-c452, June-2022

- [7] Savitha K N, Sasi Gopalan, Mathematical Models in 2D Daubechies Wavelet Transform, Wutan Huatan Jisuan Jishu, ISSN:1001-1749, VOLUME 18 ISSUE 12 DECEMBER-2022
- [8] Savitha K N, Linu Pinto, and Sasi Gopalan, and Balasubramaniam. P, Equivalence Class and Modified Gaussian Methods for Normalization of Time Series Data on Ai Models. Communicated to Expert Systems with Applications, Elsevier.
- [9] Linu Pinto, Sasi Gopalan, P. Balasubramaniam, Quantification on the Generalization Performance of Deep Neural Network with Tychonoff Separation Axioms, InformationSciences608(2022)262–285
- [10] Femy N S, Dr. Sasi Gopalan, A Time-Series Data Prediction Using Johnson-Lindenstrauss Lemma, Fuzzy Logic, And Self-Organizing Maps (accepted to Elsevier-Materials Today Proceedings),2023
- [11] Femy N S, Dr. Sasi Gopalan, A Study of Lattice Vectors in Self-Organizing Maps, Journal of Emerging Technologies and Innovative Research, ISSN-2349-5162, June 2022 Vol.9, Issue 6.
- [12] Suja Chandrasekharan Nair, Sudheep Elayidom, Sasi Gopalan, Mining frequent patterns with generalized linear model for traffic density analysis, Multimedia Tools and Applications <https://doi.org/10.1007/s11042-022-13802-2>, 2022.
- [13] C. S. Anupriya, Sasi Gopalan, A New Approach on Connectivity of Anti Fuzzy Graphs Using Anti fuzzy Paths, Journal of Emerging Technologies and Innovative Research, ISSN-2349-5162, May 2022, Volume 9, Issue 5
- [14] Rohit T P, Sasi Gopalan, Sahil Athrij, Sunith V S, Amrutha Dinesh and Varsha Shaheen, Optimization Technique For Perfect Pairing, Springer Nature 2021(Under Review)
- [15] Rohit T P, Sahil Athrij , Sasi Gopalan, Protocol For Dynamic Load Distributed Low Latency Web-Based Augmented Reality And Virtual Reality, Computational Intelligence in Communications and business Analytics(CICCBA-2023) ,pp 118–129.
- [16] Linu Pinto, Sasi Gopalan, P. Balasubramaniam, On the stability and generalization of neural networks with VC dimension and fuzzy feature encoders, Journal of the Franklin Institute 358 (2021) 8786–8810
- [17] Suja Chandrasekharan Nair, M. Sudheep Elayidom and Sasi Gopalan, Call detail record-based traffic density analysis using global K-means clustering, Int. J. Intelligent Enterprise, Vol. 7, Nos. 1/2/3, 2020

- [18] Anju S Mattom, Sasi Gopalan, Algorithm to compute transitive closure of fuzzy soft relation. *J. Math. Comput. Sci.* 10 (1), 95-109, 2019. 2, 2020
- [19] Anju S Mattom, Sasi Gopalan, Rough approximate operators based on fuzzy soft relation, *Italian Journal of Pure and Applied Mathematics*, ISSN 2239-0227, N.43-2020(912-925).
- [20] Linu Pinto, Dr. Sasi Gopalan, Limiting Network Size within Finite Bounds for Optimization, 2019.
- [21] Viji Gopal, Varghese Paul, M Sudheep Elayidom, Sasi Gopalan, Similarity Detection in Large Volume Data using Machine Learning Techniques, *International Journal of Recent Technology and Engineering (IJRTE)* ISSN: 2277-3878, Volume-8 Issue-3, September 2019
- [22] Suja C Nair, M. Sudheep Elayidom, Sasi Gopalan ,KM-MBFO: A Hybrid Hadoop Map Reduce Access for Clustering Big Data by Adopting Modified Bacterial Foraging Optimization Algorithm, *International Journal of Recent Technology and Engineering (IJRTE)* ISSN: 2277-3878, Volume-8, Issue-2S11, September 2019
- [23] Linu Pinto, Sasi Gopalan, General Standard Sigmoid Networks and predictive modeling Education Through VC , *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 13, Number 3 (2018)
- [24] Nisha A. B, Sasi Gopalan, Opening Based Interpose Spotting of Digital Images (Accepted for publication (2019)).
- [25] Linu Pinto, Sasi Gopalan, VC Dimension Based Fuzzy Sigmoid Neural Network (VC-FSNN), *IEEE Conference Proceedings*, August 2018 (Accepted for Publication) IF:14.91
- [26] Anju S Mattom, Sasi Gopalan, Algebraic Structure of Fuzzy Soft Sets, *International Journal of Applied Engineering Research (IJAER)*, Volume13 Number 3 (2018) Special issue.
- [27] V. Gopal, V. Paul, M. S. Elayidom and S. Gopalan, "An Encryption based Security Enhancer Tool for IaaS Applications in Cloud Computing," in the proceedings of 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), Bangalore, India, 2018, pp. 819-823.
- [28] Suja C Nair, Sudeep Elayidom and Sasi Gopalan, Attribute Based Hierarchical Clustering algorithm for Traffic Density Analysis, *International Journal of Applied Engineering Research (IJAER)*, Volume13 Number 3 (2018) Special issue.

- [29] Nisha A.B, Sasi Gopalan, Meddle Detection Based on Morphological Opening, International Journal of Applied Engineering Research (IJAER), IF:,2018
- [30] Femy N.S, Sasi Gopalan, Mathematical Analysis of Topology Optimization in 3D Printing, International Journal of Applied Engineering Research (IJAER), ISSN 0973-4562, Vol.13, No.3(spl), pp:180-183, 2018.
- [31] Cinderella T J, Sasi Gopalan, Introduction to Balance Hyper cubes, Far East Journal of Mathematical Science (FJMS), 2018 (Accepted for Publication)
- [32] Sasi Gopalan, Linu Pinto, S. Sunderarajan, Mathematical Model Kernel Support Vector Machine of Adaptive Neuro Fuzzy System, Science and Knowledge Research Society, May 2017.
- [33] Savitha. K.N and Sasi Gopalan, A Mathematical Model for the Approximations of Signals using Haar Wavelet Transforms, ICMMCMSE, February 2017.
- [34] Anju. S. Mattom and Sasi Gopalan, Product of Fuzzy Soft Groups, Advances in Fuzzy Mathematics, ISSN 0973-533X, Volume No.12, Number 2 (2017), pp.205-214, Research India Publications.
- [35] Linu Pinto, Sasi Gopalan, Support Vector Machine and Kernel optimization for image classification, IEEE Conference Proceedings, ICACCS, 2017, DEC 2016.
- [36] Suja C Nair, Dr. Sudeep Elayidom M and Dr. Sasi Gopalan, Design & Implementation Of Traffic Analysis And Prediction System Using CDR Data, International Journal of Advanced Scientific Research and Management, Vol. 2 Issue 5, May 2017. ISSN 2455-6378
- [37] Suja C Nair, Sudeep Elayidom and Sasi Gopalan, Impact of CDR Data Analysis using Big Data Technologies for the Public an Analysis, pp.542, IEEE Conference proceedings, 2017
- [38] Dr. Sasi Gopalan, Linu Pinto, Sheela. C, Arun Kumar, Function Approximation with deep Neural Network for image classification In Fuzzy Domain , Applied Mathematics and information Sciences(AMIS), Accepted in October 2016.
- [39] 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), Vol.1, No.3,2016.

- [40] Dr. Sasi Gopalan and Linu Pinto, et.al, A Mathematical Model of Neuro Fuzzy Approximation in image Classification, Applied Mathematics & Information Sciences, June 2016.
- [41] Sasi Gopalan and Nisha A.B, Approximations in Mathematical Morphology and Rough Sets, International Advanced Research Journal in Science Engineering & Technology, Volume2, issue 11, November 2015.
- [42] Sasi Gopalan and Arathi. S, New Mathematical Model in Image Enhancement Problem, Science Direct, Elsevier, 2015.
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- [45] 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)
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- [47] Sasi Gopalan, Madhu. S. Nair, Souriar Sebastian and C. Sheela, Approximation Studies Using Fuzzy Logic in Image Denoising Process, ICLICC,113-120, Springer (2010).
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Applications of Probability Theory, Random Process and Random Variables in Computer Science, Sponsored by AICTE , Tiruvalla (MACFAST), August,2008.

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- [52] Sasi Gopalan, Function Approximation using Fuzzy Image Processing, ISTE Short Term Training Programme organized at school of engineering, CUSAT, Kochi-22, December, 2010.
- [53] Sasi Gopalan, Fuzzy Mathematics and image processing, Proceedings of International Seminar on New Trends in Application of Mathematics, Barath Matha College, January,2011.
- [54] 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.

### **Editor**

1. International Conference on Science & Technology (ICST-2018) Conference Proceeding.

### **Countries Visited**

<b>Sl.No</b>	<b>Country</b>	<b>Year</b>	<b>Purpose of the Visit</b>
<b>1</b>	<b>Greece, Europe</b>	<b>2015, October</b>	<b>Academic Purpose</b>
<b>2</b>	<b>Malaysia</b>	<b>2017, May</b>	<b>Academic Purpose</b>
<b>3</b>	<b>Singapore</b>	<b>2017, May</b>	<b>Private visit</b>
<b>4</b>	<b>Portugal, Europe</b>	<b>2018, September</b>	<b>Academic Purpose</b>

### **Achievements**



- *Introduced Equal Opportunity Cell (EOC) in CUSAT for the benefit of SC/ST/OBC & Minority Students.*
- *Strengthened Activities of UGC Cell for SC/ST in CUSAT.*
- *Organized many programmes for the benefit of weaker sections of the society inside and outside of CUSAT campus.*
- *Active involvements in different activities helped to bring many students to the mainstream.*