COLLEGE OF ENGINEERING PERUMON

Computer Science and Engineering

FACULTY PROFILE

Name of the Faculty	Dr. K. S. Angel Viji
Designation	Associate Professor
Email ID	drksangelviji@perumonec.ac.in

Qualifications

Degree	Specialization	University	Year
Ph.D.	Computer Science and Engineering	NICHE	2015
M.E.	Computer Science and Engineering	Anna University	2007
B.E.	Computer Science and Engineering	Anna University	2005

Experience

Designation	Institution	Period
ASSOCIATE PROFESSOR	COLLEGE OF ENGINEERING PERUMON	JUNE 20, 2022 to Till date
ASSOCIATE PROFESSOR	COLLEGE OF ENGINEERING KIDANGOOR	November 23, 2021 TO JUNE 19 2022 (7 Months)
ASSOCIATE PROFESSOR	COLLEGE OF ENGINEERING PERUMON	OCTOBER 21, 2021 TO November 22, 2021 (1 Month)
ASSOCIATE PROFESSOR	COLLEGE OF ENGINEERING KIDANGOOR	MARCH 2016 TO OCTOBER 20, 2021 (5.7 Yrs)
ASSISTANT PROFESSOR	NOORUL ISLAM CENTRE FOR HIGHER EDUCATION KUMARACOIL	AUGUST 2010 TO MARCH 16, 2016 (5.8 Yrs)
LECTURER	NOORUL ISLAM CENTRE FOR HIGHER EDUCATION KUMARACOIL	JULY 2009 to AUGUST 2010 (1.2 Yrs)
LECTURER	NOORUL ISLAM COLLEGE OF ENGINEERING KUMARACOIL	SEPTEMBER 2007 to JUNE 2009 (2.9 Yrs)

Areas of Interest	Image Processing
	Network Security, Cloud Security

PhD Guidance: Produced- 5 Scholars and ongoing- 2

Courses Taught	Image Processing, Artificial Intelligence, Security in Computing etc.,

Papers Published -Journal	Sl. No.	Title of the paper	Name of the Journal	Volume No., page & year of Publication
	1	Performance Evaluation of Standard Image Segmentation Methods and Clustering Algorithms for	European Journal of Scientific Research	Vol: 79 & 2012

		Segmentation of MRI Brain Tumor Images (K. S. Angel Viji, Jayakumari J.)		
	2	Colorization of Grayscale image using Multiple Kernal FCM Clustering. (Devipriya J, K. S. Angel Viji)	International Journal of Science Engineering and Technology Research	Vol: 2, No: 4, pp: 937-941 & 2013
	3	Abnormality Segmentation of MRI Brain Images using Fuzzy Nearest Neighbour Approach (AkhilaThankam, K. S. Angel Viji)	International Journal of Computer Application	Vol: 67, No:19, pp: 6-12, April 2013.
	4	Texture based Segmentation of MRI Brain Tumor Images (K. S. Angel Viji, Jayakumari J.)	International Review on Computers and Softwares	Vol: 8 No: 9, pp: 2051-2057, September 2013
	5	Adaptive maximum global clustering based on coarse-fine scheme for Human Images (K. S. Angel Viji)	International journal of Management, IT and Engineering	Vol: 3 No:7, 402- 410, November 2013
	6	Optimized region growing segmentation algorithm for MR Brain Images(K. S. Angel Viji, Jayakumari J.)	Australian Journal of Basic and Applied Sciences	Vol: 8 No: 17, 374-378, November 2014
	7	Deformable Segmentation and Simulation of Brain Tumors in MR Images for Evaluation of Segmentation Efficacy(Winses Albino, K. S. Angel Viji)	Image Processing and Networking	Special Issue II, 2014
	8	Detection of Microaneurysm in Digital Fundus Image(Vijaya Boopathy, K. S. Angel Viji)	Image Processing and Networking	Special Issue II, 2014
	9	Recent Survey on Image Transmission Security(Sahina, K. S. Angel Viji)	Image Processing and Networking	Vol 10, Special Issue II, 2015
	10	Modified LBP Based Region Growing Segmentation of MR Brain Images(K. S. Angel Viji, Jayakumari J.)	Advances in Intelligent and Soft Computing-Springer	Vol: 326, 1453-1465, 2015 (Springer)
	11	Modified Region Growing Segmentation Optimized with Genetic Algorithm for MRI Brain Images(K. S. Angel Viji, Jayakumari J.)	Int. J. Enterprise Network Management	Vol. 7, No. 1, 55-69, 2016

	12	Modified Texture, Intensity And Orientation Constraint Based Region Growing Segmentation Of 2D Mr Brain Tumor Images(K. S. Angel Viji, Jayakumari J.)	International Arab Journal of Information Technology	Vol 13 No: 6A Special Issue 2016	
	13	A Brain Abnormality Detection and Tissue Segmentation Technique by Using Dual Mode Classifier (K. S. Angel Viji, Jayakumari J.)	International Arab Journal of Information Technology	Vol 13 No: 6A Special Issue 2016	
	14	Data Space and processing time trade off for data security in cloud computing (G. Venifa Mini, K. S. Angel Viji)	International Journal of Computer Technology and Applications	Vol 9 No: 28, PP.1-13, 2016	
	15	A Survey on Saliency Detection (Archana, K. S. Angel Viji)	International Journal of Innovative Research in Science, Engineering and Technology	Vol: 5; Special Issue 14; pp: 27 to 32 2016	
	16	A Brief View of Anomaly Detection Techniques for Intrusion Detection Systems(C. V. Priya, K. S. Angel Viji)	International Journal of Computer Technology & Applications,	Vol 8 No: 2, pp: 270-278 2017	
	17	A Comprehensive Cloud Security Model with enhanced key management,access control and data anonymization featured (G. Venifa Mini, K. S. Angel Viji)	Int. Journal of Communication Networks and Information Security	Vol: 9, No: 2, pp:263-273 August 2017	
	18	Health Care Application System using IOT(Vinu Williams, K. S. Angel Viji)	Int. Journal of Advance research, Ideas and Innovations in Technology.	Vol: 3; Issue: 6; pp: 1141-1148; 2018	
	19	Survey on removal of Rain or Snow from a single color Image(Binju Bentex, K. S. Angel Viji)	Int. Journal of Advance research, Ideas and Innovations in Technology.	Vol: 4; Issue: 1; pp: 85-88; 2018	
	20	Using Low Level Features-Fingerprint Liveness Detection from Single Image. (Vinu Williams, K. S. Angel Viji)	Int. Journal of Advance research, Ideas and Innovations in Technology.	Vol: 3; Issue: 6; pp: 1141-1148; 2018	
	21	Android Malware detection through online learning. (Vinu Williams, K. S. Angel	Int. Journal of Advance research, Ideas and Innovations in	Vol: 3; Issue: 6; pp: 1141-	

		Viji)	Technology.	1148; 2018	
	22	Keystroke dynamics based authentication framework using back propagation neural network(C. V. Priya, K. S. Angel Viji).	Int. Journal of pure and Applied Mathematics	Vol: 119; No: 10; pp: 1097-1104; 2018	
	23	Computer Assisted Diagnosis of cancer on Medical Images- A Survey(D. Hevin Rajesh)	West Indian Medical Journal		
	24	A Survey on Data Centric Access Control with Role Based Proxy Re-encryption in Cloud Environment(Akhila Raj, K.S. Angel Viji)	International Journal of Scientific Engineering and Research (IJSER) ISSN (Online):	Volume 7 Issue 3, March 2019, pp: 2347-3878	
	25	An Efficient Technique to Segment the Tumor and Abnormality Detection in the Brain MRI Images Using KNN Classifier(K. S. Angel Viji, D. Hevin Rajesh)	Mangalam college Materials Today Proceedings	Volume 24, Part 3, 2020, Pages 1944-1954	
	26	A novel biometric authentication system using keystroke dynamics and optimized multilayer perceptron neural network(C. V. Priya, K. S. Angel Viji).	IJITEE	ISSN: 2278-3075, Volume-8 Issue-6, April 2019	
	27	Applying empirical thresholding algorithm for a keystroke dynamics based authentication system(C. V. Priya, K. S. Angel Viji).	Journal of information and communication technology	Journal of ICT, 18, No. 4 (October) 2019, pp: 383-413	
	28	Security of Web Browser: A Study on Attacks and Their Defences (Arshey, K. S. Angel Viji)	TEST Engineerig and Management	May – June 2020 ISSN: 0193-4120 Page No. 7951 – 7961	
	29	Spinal Canal Abnormalities in Early Stage Detection of Scoliosis Disease: A Review (Gayatri)	Jour of Adv Research in Dynamical & Control Systems,	Vol. 11, 04-Special Issue, 2019	
	30	Computational analysis and detection of diabetic maculopathy in retinal images-Joshua	JARDCS	Volume 11	Issue 2 Pages: 88-98	
	31	A study on removing rain streaks from an image in	International Journal of Advance Research, Ideas	Volume 5, Issue 6,	

		outdoor vision system (Aiswarya, K. S. Angel Viji	and Innovations in Technology	page 262-267	
	32	Smart Traffic Congestion Control System(Pinky Ann Jose , Lijo Joseph , Mathews Mittathani , Jayalakshmi, Angel Viji K S)	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Volume 8 Issue VII July 2020-Pp 1210-1213	
	33	Retinal Fundus Image Analysis for Diagnosis of Diabetic Maculopathy(Joshua, Angel)	International Journal of Recent Technology and Engineering.	ISSN: 2277-3878, Volume-8 Issue-6, March 2020	
	34	An optimization-based deep belief network for the detection of phishing e-mails (Arshey, Angel)	Data Technologies and Applications Received 26 February 2020 Revised 7 May 2020 Accepted 22 May 2020	2020	
	35	Refined approach for automatic segmentation of spinal canals(Gayatri)	Oxidation communication	43, No 4, 735–753 (2020)	
	36	A Method for Enhancing The Images for Early Detection of Scoliosis(Gayatri)	IJERT International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 Published by, www.ijert.org ICCIDT - 2021 Conference Proceedings	2021	
	37	Keystroke Dynamics-Based Authentication System Using Empirical Thresholding Algorithm(Priya, Angel)	International Journal of Information Security and Privacy Volume 15 • Issue 4	Pp 98-117 2021	
	38	FRACTIONAL-EWA BASED DEEP CNN FOR PHISHING ATTACK DETECTION(Arshey, Angel)	Indian Journal of Computer Science and Engineering (IJCSE) DOI : 10.21817/indjcse/2021/v12i5/211205014 Vol. 12 No. 5 Sep-Oct 2021	Pp 1163-1178 e-ISSN : 0976-5166 p-ISSN : 2231-3850	
	39	Security of web browser: A study on attacks and their defences	Engineering and Management	– June 2020 0193-4120 No. 7951 –	
	40	Spinal canal abnormalities in early detection of scoliosis disease: A	of Adv Research in Dynamical & Control Systems,	11, 04-Special Issue, 2019	

	Sl. No.	Title of the paper	Journal/Details	Details
		review(Gayatri, Angel)		
	41	Sensing Of White Blood Cells Using Residual Network And A Comparison Study Using Various Pre-Trained Network(Shalini,Angel)	International Journal of Advances in Electronics and Computer Science	ISSN (p): 2394-2835 Volume-8, Issue-12, Dec.-2021
	42	Using LapSRN (Image Resolution Deep Learning Model) with Transfer Learning(Athira sree, Angel, Linda)	International Journal of Telecommunications & Emerging Technologies	ISSN: 2455-0345 Volume 8, Issue 1, 2022 DOI (Journal): 10.37628/IJTET
	43	Feature Extraction and Detection of White Blood Cells from Microscopic Images Using Neural Network(Shalini, Angel)	NeuroQuantology |	June 2022 | Volume 20 | Issue 6 | Page 5719-5730 | doi: 10.14704/nq.2022.20.6.NQ22579

Papers Published -Conference	Sl. No.	Title of the paper	Name of Seminar/Symposium/ Workshop/Conference	
	1	Texture Filtering in Texture spectrum using Base 5 Method (K. S. Angel Viji, S. Suresh Kumar)	National Conference in Computer Communication and Instrumentation System	
	2	Base 5 Method of Texture Filtering in Texture spectrum using Wavelet Transformation(K. S. Angel Viji, S. Suresh Kumar)	NICE	
	3	Feature Extraction in Clustering Problems(K. S. Angel Viji)	National Conference on Internet and Multimedia Communication	
	4	Automatic Detection of Brain Tumor Through Magnetic Resonance Imaging (K. S. Angel Viji)	National Conference on Crypt Analysis Techniques in Computer Hacking	
	5	A Novel Image Enhancement(K. S. Angel Viji)	National Conference on Information Science and Engineering	
	6	Automatic Detection of Brain Tumor based on MRI using CAD system with watershed segmentation(K. S. Angel Viji, Jayakumari J.)	International Conference on Signal Processing, Communication computing and networks.	

	7	Adaptive Maximum Global Clustering Based on Coarse- Fine Scheme for Human Images	National Conference on Recent Advancement in Computer and Communication Engineering	
	8	Modified texture based region growing segmentation of MR brain images(K. S. Angel Viji, Jayakumari J.)	International conference on Information and Communication Technologies	
	9	Survey on Secure Image Transmission (Sahina. P. S, Angel Viji. K .S)	Emerging Trends in Science and Technology – ETAST'15	
	10	Abnormality Segmentation of MRI Brain Images (R. L. Prabin, K. S. Angel Viji)	Emerging Trends in Science and Technology – ETAST'15	
	11	Brain Image Segmentation Based on Bilateral Symmetry Information (B. Balu, K. S. Angel Viji)	Emerging Trends in Science and Technology – ETAST'15	
	12	Detection of Routing Misbehaviour in MANETS (Rameez Ahmed,Rohan P., K. S. Angel Viji)	NCICTA'16	
	13	Integrated Desktop Search Engine in Intranet (Irshad PP, Vishnu Prasad G., K. S. Angel Viji)	NCICTA'16	
	14	Data Anonymization Techniques in Cloud- Survey (G. Venifa Mini, K. S. Angel Viji)	NCREIS 16	
	15	A Survey on Saliency Detection Framework (Archana M., K. S. Angel Viji)	NCREIS 16	
	16	A Survey on Saliency Detection (Archana, K. S. Angel Viji)	TECHSYNOD'16	
	17	Keystroke dynamics based authentication framework usingemprical threshold values(C. V. Priya, K. S. Angel Viji).	NACET 2K18	
	19	Hand gesture recognition system (Tankaraj,Silpa, Litty, K. S. Angel Viji)	NCICSES' 19	
	20	Single Color Image De-Raining in Outdoor Vision Systems: A 2-Step Approach (Aiswarya, K. S. Angel Viji	International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE), Vellore	
	21	Methods for reducing quality degradation of images caused by the influence of a dynamic weather condition(Aiswarya, K. S. Angel Viji)	International Conference on Innovations in Science and Technology for Sustainable Development (ICISTSD 2020) College of Engineering Perumon, Nov 2020	

	22	Bio inspired metaheuristic optimization technique for detection of phishing emails(Arshey, Angel)	ICCIDT 2K21		
	23	"Detection of leukemic blood cells from microscopic images using local gabor binary pattern and neural network" (Shalini)	NCREIS' 21		
	24	A Survey on Image and Video Super Resolution with Deep Learning Models (Athirasree)	NCREIS' 21		
	25	Multiple Object tracking using deep learning with yolo v5(Aswin)	NCREIS' 21		
	26	Segmentation of Spinal Canal using Active Contour Model(Gayatri)	ICBSII 2021		
	27	A Survey on Deepfake video detection techniques using Deep Learning(Athirasree)	ICNGIS 2022		
Training Programs Attended	**S. No.**	**Name of the FDP/Workshop**	**Sponsoring Institution**		
		A. International:			
	1	International Conference on Emerging Adaptive Systems And Technologies(EAST- 2005)	NICE		N 1(D
		B.Others			
	2	National Workshop on ns-2	NICE(IT Dept)		25
	3	Workshop on Image Processing	NICHE(MCA Dept)		NIC 19
	4	Workshop on Research methodology and Statistical Package	NICHE		NIC 16 Sep
	5	Workshop on Gateway to Research	NICHE		NIC 23 Sep
	6	Workshop on Image Processing using MATLAB	NICHE(MCA Dept)		NIC
	7	Workshop on Application of Statistical Methods	NICHE		NIC 11 20
	8	Workshop on Soft Computing Tools in signal and Image Processing	St Xavier's Catholic College of Engineering, Chunkankadai		Lap 21
	9	Workshop on Research Project Writing	NICHE		NIC 21
	10	Workshop on Control and Image Processing Applications: Hands on Training using MATLAB	NICHE(EIE Dept)		N 1{ O

11	Workshop on Hands on MATLAB Training Program on Intelligent System Design	ANNA University, Konam		Ti Ke 1 2(
12	Workshop on Medical Image Processing using MATLAB	NICHE(BioMed Dept)		N 2. 2(
13	National workshop on BIG DATA	NICHE-CSE		NIC 29
14	National Workshop on LATEX	NICHE-Maths		NIC 25 Sep
15	Workshop on Statistical Methods	NICHE		NIC
16	Workshop on "Knowledge Discovery for research application"	NICHE(CSE)		24
17	Workshop on Image Processing and Practical Applications using MATLAB	NICHE		NIC 21 20
18	FDP on Advances in Non-Linear Control	CE, Kidangoor(ECE)		31 20
19	FDP on Natural Language Processing and Machine Learning	CE, Kidangoor(CSE)		18
20	FDP on Pedagogy	IIT Madras(Teaching Learning Centre)		28
21	Five days workshop on Institutional and Personal Competency Building	CUSAT(School of Management Studies)		Sep Oc
22	Six days FDP on "Telecom Network Architecture"	BSNL, Trivandrum		14
23	Five Days FDP on "Hands-on Training in Open Source Tools for Kernal Programming and Administration"	IHRD, Trivandrum		5th
24	Five Days FDP on "Cyber Forensics"	CDAC, TECHNOPARK,Trivandrum		19
25	Three Days Training on "Power Industry Familiarization"	PETARC, Moolamattam		10
26	Three Days FDP on "Creative thinking, Problem solving and Decision making"	IIM, Kozhicode, Kerala		18
27	Three Days personality development programm on "Communication and Presentation Skills"	ESCI, Hyderabad		7th
28	Research Colloquium on "Recent Advances in Soft Computing"	CEK, Kidangoor		23
29	Five Days FDP on "The IOT"	CEK, Kidangoor		1,2 20
	BIOMEDICAL SIGNAL PROCESSING	CEK ECE		
30	Six days FDP on "Visualisation and Modelling using open GL""	CET, Trivandrum		4th 20
31	Five days FDP on "Research Challenges in Data Analytics"	SCT Trivandrum		6th De
32	3days	Mangalam College		3 c

Sl. No.	Online FDPs		
1	Digital Teaching Techniques	ICT Academy	6 days 29/6/2020 to 4/
2	Image Processing using MATLAB	St Xaviers Catholic College of Engineering, Chunkankadai	6 days 6/7/2020 to 11/
3	Data Science using R	St Xaviers Catholic College of Engineering, Chunkankadai	6 days 20/7/2020 to 25
4	Trends and Technologies in digital era	Noorul Islam Centre for Higher Education	5 days 27/7/2020 to 31
5	Web Programming	St Xaviers Catholic College of Engineering, Chunkankadai	6 days 3/8/2020 to 8/8
6	ATAL Online FDP on Machine Learning & Applications	College of Engineering Kidangoor	5 days 24/08/2020to 2
7	Applications of Artificial Intelligence and IoT in Engineering	Department of Computer Science and Engineering, College of Engineering Perumon	6 days 01/02/2021-06/
8	Data Analytics	Department of Computer Science and Engineering, College of Engineering Kidangoor	5 days 15/02/2021 to 1
9	Exploring Image Processing and Computer Vision using Python	Department of Computer Science and Engineering, College of Engineering Kidangoor	5 days 01/032021 to 0!
10	Data Analytics- A hands-on Experience.	Department of Computer Science and Engineering, College of Engineering Kidangoor	5 days 15/03/2021 to 1
11	Blockchain Technology and its applications	EduXLabs	10 Days 24/5/2022 to 7/
12	FEP on "AI & ML – Industry Practices & Perspectives"	TCS	5 days 12/9/2022 to 16

Programs Organized

1. NCREIS'16- 2 Days national conference on Novel and Challenging issues
and Recent innovations in Engineering and Information Sciences during 19th
& 20th October 2016, sponsored by TEQIP II in association with IEEE circuits
and systems India chapter.

2. RCRASC' 17- 2 Days research colloquium on "Recent Advances in Soft
Computig Techniques" on 23rd and 27th Feb 2017, sponsored by TEQIP II.

	3. Organised 3 days **Induction Training Programme** for faculties on "PYTHON-effective teaching learning method" during 19th to 21st July 2017, sponsored by CAPE, Government of Kerala. **4.** Organized **NCREIS '21** during 15,16 July 2021. **5.** Organized International Conference **ITCES 2023** during June 15, 16 2023
Academic Achievements	Guided more than 20 Mtech level and more than 30 BTech level projects; 100% Result;
Membership in Professional Societies	ISTE
Other Responsibilities/ Achievements	IQAC Coordinator, PG Coordinator, UG Coordinator, KTU Question paper setting(UG, PG, Ph.D.), Ph.D. Guideship, Indian Examiner(Ph.D. Thesis)…