


FACULTY PROFILE

1	Name of Faculty	Dr. Tara Raveendran		
2	Designation	Professor & Head of the Department		
3	Department	Applied Electronics & Instrumentation Engineering		
4	D O J	11.3.2019		
5	Contact No	9447452653		
6	Email	tara@geckkd.ac.in		
7	Academic Qualifications			
	Degree	Year	Branch/Area of specialization	Institution
	Ph D	2013	Statistical Signal Processing	Indian Institute of Science, Bangalore.
	M E	2005	Systems Science and Automation	Indian Institute of Science, Bangalore
	B Tech	1993	Electronics Engineering	Cochin University of Science and Technology.
8	Professional Experience			
	Period served	Name of Institution	Designation	
	3.7.2000-5.6.2009	College of Engineering, Trivandrum	Lecturer in Electronics & Communication Engg. (Includes the QIP- ME deputation period)	
	6.6.09-26.7.2012	Rajiv Gandhi Institute of Technology, Kottayam	Associate Professor in Electronics & Communication Engg. (Includes the QIP-Ph D deputation period)	
	27.7.12-24.7.2017	Government Engineering College, Thrissur	Associate Professor in Electronics & Communication Engg.	
	25.7.2017-8.3.2019	College of Engineering, Trivandrum	Associate Professor in Electronics & Communication Engg.	
	11.3.2019-Continuing	Government Engineering College, Kozhikode	Professor in Electronics & Communication Engg.	
9	Publications (List is attached)			
	Journal	7		
	International Conference	6		
	National Conference	3		

10	No. of STTPs attended from 2012	6 (List is attached)	
11	Membership in professional Bodies	ISTE	
12	No. of M.Tech. projects guiding/guided from 2012 till date	Guided	Guiding
		6	-
13	No. of Ph. D. students guiding/guided from 2012 till date	Guided	Guiding
		-	2
14	Field of Interest	Statistical Signal Processing	
15	Additional Responsibilities	Convener- Disciplinary Committee	

PUBLICATION DETAILS

1. Publications in International Journals

Sl. No	Authors	Title of the Paper	Name of International Journal (SCI-E Indexed)	Impact Factor
1	Tara Raveendran, Saurabh Gupta, R. M. Vasu, Debasish Roy	Pseudo-time particle filtering for diffuse optical tomography	Journal of the Optical society of America, Vol. 28, Issue 10, pp. 2070-2081, Oct 2011	1.861
2	Tara Raveendran, Saurabh Gupta, R. M. Vasu, Debasish Roy	A pseudo-time EnKF incorporating shape based reconstruction for diffuse optical tomography	Medical Physics, Vol. 39, 1092-1101, Feb 2012	3.177
3	Tara Raveendran, R. M. Vasu, Debasish Roy	A Nearly Exact Reformulation of the Girsanov Linearization for Stochastically Driven Nonlinear Oscillators	Journal of Appl. Mech, 80(2), pages 021020, 11pages, Oct. 2012	2.127
4	Tara Raveendran, Saikat Sarkar, D Roy, R. M. Vasu	A novel filtering framework through Girsanov correction for the identification of nonlinear dynamical	Inverse problems, 29 pages 065002 (20pp) , 2013	1.858

		systems		
5	Tara Raveendran, D Roy, R M Vasu	A scaled unscented transformation based Directed Gaussian sum filter for nonlinear dynamic system identification.	Probabilistic EM- Elsevier, 34 83–90, 2013	1.693
6	Tara Raveendran, D Roy, R M Vasu	Iterated gain based stochastic filters for dynamic system identification	Journal of the Franklin Institute-Elsevier, vol 351, issue 2, pp 1093-1111, Feb 2014	3.653
7	Tara Raveendran, D Roy, R M Vasu	Iterated gain based stochastic filters for dynamic system identification- annealing type iterations and the filter bank	Probabilistic Engineering Mechanics, vol 38, Oct 2014, Pages 77–87	1.693

2. Publications in International Conferences

Sl. No.	Authors	Title of the Paper	Name of International Conference
1	Saurabh Gupta, Tara Raveendran R. M. Vasu, Debasish Roy	Pseudo-time Particle Filtering with quasi-Newton steps for Diffuse Optical Tomography	Mathematics in Imaging, OSA Publishing, Heidelberg, Germany, 25-28 July 2016, doi:10.1364/MATH.2016.MW3H.2
2	Rooji Jinan, Tara Raveendran	Particle Filters for Multiple Target Tracking	Procedia Technology, Science Direct, Volume 24, 2016, Pages 980–987, International Conference on Emerging Trends in Engineering, Science and Technology (ICETEST - 2015)doi:10.1016/j.protcy.2016.05.215
3	Chrisly Issac, Rosbel Mathew, Tara Raveendran	Mobile Station Tracking in Multipath Wireless Networks Using Ensemble	Advances in Computing and Communications (ICACC), 2014 Fourth International Conference

		Square Root Filter	on , 27-29 Aug. 2014, Cochin.
4	Rosbel Mathew, Tara Raveendran, Chrisly Issac,	Target tracking using Stochastic Filters.	International Conference on speech and signal Processing(ICSSP 2014) - Elsevier, 226-230, TKM College of Engg., Kollam
5	Saurabh Gupta, Tara Raveendran R. M. Vasu, Debasish Roy	Accelerated Particle Filtering with quasi-Newton steps for Diffuse Optical Tomography	Optics in the Life Sciences Congress Optics and the Brain 2017 San Diego, California United States, 2-5 April 2017
6	Saurabh Gupta, Tara Raveendran R. M. Vasu, Debasish Roy	Pseudo-time Ensemble Kalman Filtering for Ultrasound Modulated Optical Tomography	Biophotonics Congress: Biomedical Optics Congress 2018 Hollywood, Florida United States, 3-6 April 2018

3. Publications in National Conferences

Sl. No.	Authors	Title of the Paper	Name of National Conference
1	Deepa R. Das, Tara Raveendran,	Medical Image Registration based on Mutual Information and Genetic Algorithm	NCTT 06, College of Engineering, TVM; pages EC18-EC22.
2	Naveen S., Tara Raveendran	A Novel Approach For 3D Face Recognition	NCTT 08, 21-22 Nov 2008, College of Engineering, TVM; pages 335-340.
3	Nisha J. S., Tara Raveendran	Human Motion Tracking Based on SIR Particle Filter	NCTT 08, 21-22 Nov 2008, College of Engineering, TVM; pp 361-366.

LIST OF STTP'S ATTENDED (from 2012 onwards)

Course Name	Duration		Duration	Organised by	Sponsoring Agency
	From	To			
Academic Leadership	7/3/13	9/3/13	3	IIM, Kozhikode	TEQIP-II
Emerging Trends in Communication Engineering	18/3/13	23/3/13	6	GEC, Barton Hill	TEQIP
Image Processing with MATLAB	31/07/13	1/08/13	2	Mathworks Inc, Bangalore	TEQIP
Applications of Linear Algebra, Wavelet Theory and Markov Chains in Engineering	19/11/13	21/11/13	4	GEC, Thrissur	TEQIP
Speech and Audio Processing	27/1/14	31/01/14	5	GEC, Thrissur	TEQIP
Robotics & Automation	3/7/2017	7/7/2017	5	CET	DTE

LIST OF STTP COORDINATED

Sl No	Name of Course	Period	Number of days	Name of institution
1	Open Source Software for Engineers	17/02/2014-19/02/2014	3 days	GEC Thrissur

LIST OF CONFERENCE ORGANISED

Sl No	Name of Conference	Period	Number of days	Name of institution
1	E-SPACE 2015 under the aegis of ICETEST 2015	9/12/2015-11/12/2015	3	GEC Thrissur sponsored by TEQIP-II

LIST OF STUDENT PROJECTS/STUDENT RESEARCH PROJECTS

M. Tech Projects guided

Sl No	Name of Project/research work	Period	Name of Student
1	Particle filters in Target Tracking	2014-2015	Rosbel Mathew
2	Ensemble square root filters for state and channel estimation in wireless communication	2014-2015	Chrisly Issac
3	Particle filters in Multiple Target tracking	2015-2016	Rooji Jinan
4	Estimation of flat fading mobile-to-mobile Communication channel using stochastic Filters	2015-2016	Annet Mary Wilson
5	Extended target detection for high frequency SONAR	2016-2017	Sreya V. C.
6	Single and Multiple Target Tracking in Bayesian Framework	2016-2017	Jishnu Shankar

INTERACTION WITH OUTSIDE WORLD/INVITED TALKS/PARTICIPATION IN CONFERENCES

Sl No	Name of Conference	Period	Number of days	Name of institution
1.	Industry 4.0 and Advanced Manufacturing	28-29 th June 2019	2	IISc Bangalore
2	Expert Talk on Particle Filters		1	Govt. Engg. College, Sreekrishnapuram
3	ICAAM-2018	2-4 July 2018	3	NIT Trichy
4	Session Chair IC4, 2018	5-7 July 2017	3	College of Engineering Trivandrum