

National Institute of Technology, Tiruchirappalli:

Performa for CV of Faculty

Curriculum Vitae

Dr. E.S. Gopi has authored six books, of which five have been published by Springer. He has also contributed 3 book chapters to books published by Springer. He has several papers in international journals and conferences to his credit. He has 15 years of teaching and research experience. He is the coordinator for the pattern recognition and the computational intelligence laboratory. He is currently Associate Professor, Department of Electronics and Communication Engineering, National Institute of Technology, Trichy, India He is also serving as Mentor Associate dean (Admin) of IIIT, Tiruchirappalli. He has 156 citations with h-index 5 (based on Google Scholar). His books are widely used all over the world. His research interests include pattern recognition, digital signal processing and biologically inspired algorithms. The India International Friendship Society (IFS) has awarded him the "Shiksha Rattan Puraskar Award" for his meritorious services in the field of education. The award was presented by Dr. Bhishma Narain Singh, former Governor, Assam and Tamil Nadu, India. He is also awarded with the "Glory of India Gold Medal" by International Institute of Success Awareness. This award was presented by Shri Syed Sibtey Razi, former Governor of Jharkhand, India. He was also awarded with "Best Citizens of India 2013" by The International Publishing House.



1. Name: **Dr. E.S. Gopi**
2. Designation: **Assistant Professor**
3. Office Address:
Department of Electronics and Communication Engineering,
National Institute of Technology Trichy.
4. Telephone (Direct) (Optional):914312503314
5. Email (Primary):esgopi@nitt.edu
6. Field(s) of Specialization: **Pattern recognition,
Digital signal processing,
Computational Intelligence**

7. Employment Profile

Job Title	Employer	From	To
Assistant professor	National Institute of Technology, Tiruchy-15	2006	Till date
Senior Lecturer	Sri Venkateswara College of Engineering, Chennai	2003	2006
Lecturer	Sri Venkateswara College of	2001	2003

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	Engineering, Chennai		
Lecturer	Sri Muthukumuran Institute of Technology, Chennai	1999	2001
Lecturer	Raja Rajeswari Engineering College, Chennai	1998	1999

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	National Institute of Technology	27 th Feb 2015	NA	Investigations on Linear Discriminative Analysis
M. E.	Anna university	2005	First class with Distinction	Communication Systems
B.E.	Madurai Kamaraj University	1998	First class with Distinction	Electronics and Communication Engineering
XII	Vailankanni Matriculation Higher secondary school, Chennai	1994	83%	NA
X	Government Higher Secondary School, Kodambakkam, Chennai	1992	78%	NA

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Co-ordinator	Pattern recognition and computational intelligence laboratory and the newsletter COMPSIGNITT	2015	Till date
Programme member from November 2016	Community Radio Station FM 90.8	November 2016	Till date
Co-ordinator	Instrumental for the NBA activities for M.Tech. (Communication Systems)	2016	

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DPEC member	M.Tech. (Communication systems	2012	2015
BOS co-ordinator	ECE	2015	

10. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2013	Best Citizens of India 2013	The International publishing house
2013	“Shiksha Rattan Puraskar Award”, certificate of excellence by Dr. Bhishma Narain Singh, Former Governer, Assam and Tamilnadu at India International Center, New Delhi on 9 th Feb 2013	International Friendship Society (IFS)
2013	“Glory of India Gold Medal” , presented by Shri Syed Sibtey Razi, Former Governer of Jharkand , at India International Center, New Delhi on 9 th Feb 2013	International Institute of Success Awareness
2013	Young Scientist travel grant by Department of Science and Technology, SERC division to present paper in the conference held at Singapore during 26 th -28 th Feb 2010.	DST

11. Details of Academic work

BOS coordinator for the year 2015

Introduced the following courses

1. Pattern recognition and Computational Intelligence for PG (Communication System)
2. Linear algebra and Stochastic process for PG (Communication Systems)
3. Digital signal processing for wireless communication (UG)
4. Digital signal processing for medical imaging (UG).

(i) Courses taught at Postgraduate and Undergraduate levels

UG: Statistical theory of communication

Pattern recognition

Image processing

PG: Linear algebra and stochastic process

Digital Image processing

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Pattern recognition and the computational intelligence

(ii) Other contribution(s)

Video lectures created for the following courses

(1) Statistical Theory of Communication

(2) Digital Communication

Co-ordinator for the Pattern recognition and the Computational Intelligence laboratory

Co-ordinator for the Newsletter COMPSIG

Resource (Audio slides) created using 3rd year ECE students during 2016. Implemented flexible curriculum for the following subjects

(a) Global elective Pattern recognition and computational intelligence

(b) Statistical theory of communication

(c) Linear algebra and stochastic process.

Handling Research methodology (Matlab) for Ph.D. Scholars

(ECE/EEE/ICE) from 2007 onwards.

(iii) Projects guided at Postgraduate level (Sample topics)

LIST OF PROJECTS GUIDED (PG)		
No	Title of the project	Name of the student
1	Musical notes identification from vocal song recordings	Samuel Cherukutty Cheruvathu (2015)
2	Classification of grown-up facial features from childhood facial features using neural network	Kshitij H. Rachchh (2015)
3	Musical notes identification using Digital signal processing	Patel Jay Kaushikkumar (2014)
4	Real time medical data classification using Genetic algorithm based KLDA	Padarthi haribabu (2014)
5	Nondestructive imaging of solid objects	M.Vishnuvardhan reddy (2013)
6	Modelling of wind instruments using finite element method	Anish.T .T (2013)
7	Non Destructive Imaging of Solid Objects	M.Vishnu vardhan reddy (2012)
8	Signal processing approach for MUSIS synthesis using Birds sounds	Hemant Sharma (2012)
9	Scatter matrix versus proposed distance matrix for appearance based face recognition	M.Vishnu vardhan reddy (2012)
10	Generalized kernel function for kernel discriminant analysis using particle swarm optimization	Hemant sharma (2012)
11	DNA Sequences classification based on Hidden Markov Model	E.Praneeth kumar reddy (2011)
12	Depth estimation of a single image	Ashok Bandi (2011)

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12. Number of PhDs guided

List of students currently perusing Ph.D.

1. Rajasekhar (2016 onwards)
2. G.JayaBrindha (2015 onwards)
3. Neema (2015 onwards)

13. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
12-13 August, 2016	ICIS 2016	International conference	Chair person	Sponsored By TEQIP II Dept of Computer Science College of engineering, Cherthala	Le-meridian at Cochin, Kerala

14. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Guest lecture by Prof. K.K.Biswas, IIT Delhi	Local	October 16 th 2016	Co-ordinator	EEE Auditorium, NIT Trichy
Guest lecture by Prof. Dr. Andrew Thangaraj, IIT Madras	Local		Co-ordinator	EEE Auditorium, NIT Trichy

15. Invited Talks delivered

- FDP and other guest lectures in many colleges such as Anna University, Trichy section, College of Engineering Cherthala, Kerala, etc.

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16. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	During 2011	To present paper in the International conference on
Spain	During 2004	To present paper in the International conference on Independent Component Analysis, Granada, Spain.

17. Publications

(A) **Refereed Research Journals (SCI/SCIE Indexed):**

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
G.JayaBrindha, E.S.Gopi	Ant colony technique for optimizing the order of cascaded SVM classifier for sunflower seed classification	IEEE Transactions on Emerging Topics in Computational Intelligence	Vol.2, Issue 1	78-88	2018	
E.S.Gopi, P.Palanisamy	Neural network based class-conditional probability density function using kernel trick for supervised classifier	Elsevier Journal on Neuro Computing	Vol.154	225-229	2014	2.392
E.S.Gopi, P.Palanisamy	Maximizing Gaussianity using kurtosis measurement in the kernel space for kernel linear discriminant analysis	Elsevier Journal on Neuro Computing	Vol.144	329-337	2014	2.392
E.S.Gopi, P.Palanisamy	Formulating particle swarm optimization based membership linear discriminant analysis	Elsevier Journal on Swarm Intelligence and Evolutionary Computation	Vol.12	65-73	2013	3.818

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E.S.Gopi, P.Palanisamy	Fast computation of PCA bases of image subspace using its inner-product subspace	Elsevier Journal on Applied Mathematics and Computation	Vol.219, Issue 12	6729-6732	2013	1.345
E.S.Gopi	Digital image forgery detection using artificial neural network and independent component analysis	Elsevier Journal on Applied Mathematics and Computation	Vol. 194, Issue 2	540-543	2007	1.345

(B) Conferences/Workshops/Symposia Proceedings (Published by Elsevier)

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Hemant Sharma, E.S.Gopi	Signal Processing approach for music synthesis using bird's sounds	Elsevier Journal on Procedia Technology	Vol.10	287-294	2013	
Vinoth S, E.S.Gopi	Neural Network modeling of color array filter for digital forgery detection using kernel LDA	Elsevier Journal on Procedia Technology	Vol.10	498-504	2013	
E.S.Gopi, P.Palanisamy	Formulating Particle Swarm Optimization based Generalized Kernel Function for Kernel-Linear Discriminant Analysis	Elsevier Journal on Procedia Technology	Vol.6	517-525	2013	
Jay K Patel, E.S.Gopi	Musical Notes Identification using Digital Signal Processing	Elsevier Journal on Procedia Computer Science	Vol. 57	876-884	2014	Cite score 1.03
Haribabu Padarathi, E.S.Gopi	Medical data classifications using genetic algorithm based Generalized Kernel Linear Discriminant Analysis	Elsevier Journal on Procedia Computer Science	Vol. 57	868-875	2014	Cite score 1.03

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E.S.Gopi	A Novel approach to transformed biometrics using successive projections	International Conference on Digital Image Processing	doi: 10.1117/ 12.8531 70		2010	
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Published by IEEE

Authors	Title of Paper	Name of the Conference	Proceedings	Place	Year
C.Florintina, E.S.Gopi	Constructing a Linear Discrete System in Kernel Space as a Supervised Classifier	Wispnet	IEEE	Chennai, India	2017
E.S.Gopi , Sylvester Vijay R, Vasudha Rangarajan, Lakshmanan Nataraj	Brain computer Interface Analysis using Wavelet Transformations and Auto Regressive Coefficients	ICECE	IEEE	Bangladesh	2006
E.S.Gopi , N.Lakshmanan, T.Gokul, S.KumarGanesh, Perak.R.Shah	Digital Image forgery detection using Artificial Neural Network and Autoregressive Coefficients	CCECE- CCGEI	IEEE	Ottawa,Canada	2006
E.S.Gopi , Poorani Vishwanathan, Priya Sankaralingam, Sowmiya Ramakumar	A New approach to create high level features from low level features of audio clips	ICCCAS	IEEE	HongKong, CHina	2005
E.S.Gopi , E.S.Sathya	SVM Approach to number plate recognition and Classification System	ICISIP	IEEE	Chennai, India	2005
E.S.Gopi , S.R.Nirmala, Shreyas Chopra, N.H.Kaliprasad	Karhunen-Leove transform based hand identification system	ICISIP	IEEE	Chennai, India	2005

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(C) Books & Monographs Books:

Sole Author	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
E.S. Gopi	Digital signal processing for wireless communication using Matlab	Springer	2015	978-3-319-20651-6
http://www.springer.com/us/book/9783319206509				
E.S. Gopi	Digital Speech processing using Matlab	Springer	2014	978-81-322-1676-6
http://www.springer.com/engineering/signals/book/978-81-322-1676-6				
E.S. Gopi	Digital signal processing for medical imaging using Matlab	Springer	2012	978-1-4614-3139-8
http://www.springer.com/engineering/signals/book/978-1-4614-3139-8				
E.S. Gopi	Mathematical summary for digital signal processing applications with Matlab	Springer	2010	978-90-481-3746-6
http://www.springer.com/engineering/signals/book/978-90-481-3746-6				
E.S. Gopi	Algorithm Collections for Digital Signal Processing Applications Using Matlab	Springer	2007	978-1-4020-6409
http://www.springer.com/in/book/9781402064098				
E.S. Gopi	Digital Image processing using Matlab	Scitech publications	2007	9788183715867
http://www.scitechpublications.com/digital-image-processing-using-mat-lab.html				

Chapters in Books

Authors	Title of the Chapter	Name of Publisher	Year of Publication	ISSN/ISBN Number
E.S.Gopi, R.Lakshmi, N.Ramya, S.M.Sherren Farzana	Music Indexing using Independent Component Analysis with pseudo-generated sources	Springer	2004	978-3-540-23056-4
http://link.springer.com/chapter/10.1007/978-3-540-30110-3_156				
E.S.Gopi, P.Palanisamy	Scatter Matrix versus the Proposed Distance Matrix on Linear Discriminant Analysis for Image Pattern Recognition	Springer	2014	978-3-319-07352-1
http://link.springer.com/chapter/10.1007/978-3-319-07353-8_12				
Florintina. C, E.S.Gopi	Music Composition inspired by Sea wave patterns observed from beaches	Springer	2017	978-981-13-1610-4
https://link.springer.com/chapter/10.1007/978-981-13-1610-4_5				

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Kshitij Rachchh, E.S.Gopi	Inclusion of Vertical bar in the OMR sheet for Image based Robust and Fast OMR Evaluation Technique using Mobile phone camera	Springer	2017	978-981-13-1610-4
https://link.springer.com/chapter/10.1007/978-981-13-1610-4_4				
Vineetha Yogesh, E.S.Gopi, Shaik Mahammad	Particle Swarm Optimization based HMM parameter estimation for spectrum sensing in Cognitive radio systems	Springer	2018	978-3-319-89629-8
https://link.springer.com/chapter/10.1007/978-3-319-89629-8_10				