

BIO-DATA

1. Name : **Dr. Sukhendu Das.**
2. Date of birth : June XY , 1962.
3. Designation : Professor,
and Address Deptt. of Computer Science and Engg.,
IIT Madras, Chennai - 600036.
INDIA.

4. Academic qualifications:

Degree	Institute	Area/Discipline	Year
Ph. D	IIT Kharagpur	Computer Vision	1993
M. Tech	IIT Delhi	Computer Technology	1987
B. Tech	IIT Kharagpur	Electrical Engg.	1985

5. Experience :

(a) Work in India :

Organization	Designation	Period
IIT Madras	Lecturer	1989 - 1994.
IIT Madras	Asstt. Prof.	1994 – 2004.
IIT Madras	Assoc. Prof.	2004 - 2010.
IIT Madras	Professor	since June 2010.

(b) Work Abroad:

- Post-doctoral research work at the Deptt. of ET&IT, University of Applied Sciences, Pforzheim, Germany, from Dec. 2001 till May 2003.
- Gledden visiting scientist at the Deptt. Of CS&SE, University of Western Australia, Perth, Australia, from June – Aug. 2006.
- Australian Leadership Award Fellowship at the Deptt. Of CS&SE, University of Western Australia, Perth, Australia, from July – Sept. 2008.

(c) Visits Abroad :

<u>Duration</u>	<u>Place</u>	<u>Purpose</u>
Oct. - Nov. 1995	Neunkirchen, Germany	Industry Sponsored Consultancy assignment.
Sept. 2002	Toulouse, France	Present a paper at EUSIPCO '02 Conf.
Sept. 2002	Malaga, Spain	Present a paper at IASTED/VIIP '02 Conf
Aug. 2006	Hong Kong	Present a paper at IEEE-ICPR '06 Conf.
Jan. 2008	Seoul, Korea	Tutorial talks on "Computer Vision"
Nov. 2009	Cairo, Egypt	Present a paper at IEEE – ICIP '09 Conf.
July 2010	Seattle, USA	Microsoft Faculty Summit, 2010
Nov. 2011	Barcelona, Spain	DEMO on a prototype of VIDLOOKUP, short-listed (among top 12) at IEEE-ICCV-2011 Conf.
Aug. 2012	LA, USA	SIGGRAPH-2012 Conf.
Mar-Apr, 2014	Stuttgart, Germany	DAAD Sandwich Exchange Programme
Sept. 2014	Nottingham, UK	Present a paper at BMVC'14 Conf.
Oct. 2014	Paris, France	Present a paper at ICIP'14 Conf.
July 2015	Seattle, USA	Microsoft Faculty Summit, 2015
June 2016	Las Vegas, USA	Present a paper at CVPRW Conf. 2016
Dec. 2017	Long Beach, USA	Present a paper at NIPS Conf. 2017
Sept. 2018	Munich, Germany	ECCVW '18 Conference – 3 workshop papers
Dec. 2018	Perth, Australia	Two papers at ACCV '18
July 2019	Budapest, Hungary	Paper presentation and chairing session, at IJCNN '19
Mar. 2020	Snowmass Village, Colarado, USA	Paper presentation at WACV '20 .

6. Teaching Interests :

Comment from a renowned International academician, admiring my Teaching skills (also, as Annexure at end of DOC):

https://drive.google.com/file/d/10_RG2ktrGjEm3hJlcyIJEx7CyPTW1lcH/view?usp=sharing

Course No:

Course Title (*- Courses taught so far)

A. Software:

- * CS 1100 Introduction to Computing
- * CS 3500 Introduction to Operating Systems
- CS 3100 Programming Languages

B. Hardware:

- * CS 2200 Switching theory and Digital Design (& Lab.)
- * CS 2600 Computer Organization
- * CS 321 Integrated Circuit Electronics (& Lab.)
- CS 324 Microprocessors

C. Theory:

- * CS 2800 Data Structures and Algorithms (& Lab.)
- * CS 240 Numerical Computing
- CS 6030 Mathematics Concepts in Computer Science
- * CS 6015 Linear Algebra and Random Processes

D. Applications:

- * CS 5691 Pattern Recognition and Machine Learning
- * CS 6350 Computer Vision
- * CS 6777 Optimization methods for Computer Vision Applications
- * CS 6464 Concepts in Statistical Learning Theory
- * CS 6710 Advances in Visual Perception
- * CS 6360 Computer Graphics
- * CS 6849 Modern Trends in Computer Graphics
- * CS 6870 Digital Video Processing
- * CS 6340 Soft Computing
- * ID7123 Machine Intelligence and Brain Research
- CS 6310 Artificial Neural Networks.

7. Research interests :

Visual Perception - Computer Vision, Digital Image Processing, Pattern Recognition; Digital Video Analytics, Computer Graphics; Biometry; Soft Computing, Deep learning and Computational Brain modeling; Computational Science and Engineering;

8. Guidance { Stats: Ph. D. – 08 (+6); M. S. – 40 (+2);
M. Tech. + Dual – 54 ; B. Tech. – 09 } :

Sl	Degree /year	Name of Scholar	Thesis Title
1	*Ph. D / 2001	R. Balasubramanian	Some mathematical methods and simulation for the reconstruction of 3-D object primitives from arbitrary perspective views.
2	Ph. D / 2010	A. Dyana	Video Object Representation for Content Based Video Retrieval (CBVR).
3	*Ph. D / 2010	T. Mirnalinee	A Multi-stage Framework Based on Salient Features, for Automatic Extraction of Road Network from Satellite Images of Urban Areas.
4	Ph. D / 2012	P. Vinod	Face Recognition across Illumination and Variations, using a Single Training Sample
5	Ph. D / 2015	Chiranjoy Chattopdhyay	Video Content Representation Using Spatio-Temporal Features for Content-based Video Retrieval
6	Ph. D / 2016	Suranjana Samanta	Domain Adaptation Methods for Visual Object Categorization
7	Ph. D / 2019	Samik Banerjee	Face Recognition from Degraded images using Statistical and Deep Learning techniques
8	Ph. D / 2020	Geethu M Jacob	Video Stabilization, Moving Object Segmentation and Panorama Creation from Unconstrained Videos
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Currently, SIX (6) more PhD students working.

Sl	Degree /year	Name of Scholar	Thesis Title
1	* M. S. / 1997	N. Sudha	Principal Component Neural Networks for Applications in Signal Processing.
2	M. S. / 1998	N. Jagadeesh Babu	Texture Invariant Image Matching.
3	M. S. / 1999	M. Sanjay	Matching Noisy Bitmap Images Based on Distance Transform
4	* M.S. / 2001	P. Kiran Kumar	Texture Edge Extraction using One Dimensional Processing
5	*M.S. / 2002	S. Ramesh	Edginess Image for Face Recognition
6	*M. S. / 2002	K. Sharat Reddy	Source and System Features for Speaker Recognition
7	*M. S.	KVS Prasada	Automatic road detection from satellite images

	/2003	Reddy	of urban areas.
8	*M. S. / 2004	N.V. Palenkeswara Rao	Sneha-Samuham : A Parallel Computing Model over Grids
9	*M. S. / 2004	P. Vinod	Text-dependent audio-visual biometric person authentication
10	*M. S. / 2004	B. S. Venkatesh	Face detection in still gray image using Neural Networks
11	*M. S. / 2006	A. Pavan Kumar	A WMPCA-based Face Recognition System on Programmable chip
12	M. S. / 2007	Shivani G Rao	Estimation of orientation of an inclined planar texture using DWT: An approach to shape from texture
13	M. S. / 2007	Arpita Patra	Development of Efficient method for face Recognition and Multimodal biometry
14	M. S. / 2007	Manish Kalra	Framework for the fusion of 3D appearance and 2D shape cues for generic object recognition
15	M. S. / 2007	P. Deepti	Generic object recognition with virtual Manifolds and its application
16	M. S. / 2007	Lalit Gupta	Efficient texture segmentation by integrating region and edge information
17	M. S. / 2008	Surya Prakash	Active Contour Based Foreground Object Segmentation
18	*M. S./ 2008	R. Abhilash	Video Cut and Paste for 3D Composition - A Method of Video-Based Rendering for Virtual Reality Applications
19	M. S. / 2009	Sunando Sengupto	Issues in 3D Reconstruction from Multiple Views
20	*M. S. / 2010	Suranjana Samanta	Methods of feature Ranking and Selection For Pattern Classification
21	*M. S. / 2010	Suneetha Nadella	Object Oriented Framework for Hardening the Linux Kernel
22	*M.S. / 2013	Shiva Rudrani	Methods for face Recognition from Degraded Images
23	M.S. / 2013	Gyanesh Dwivedi	Simultaneous Localization And Recognition (SLAR) framework for smart (object-centric) CBIR application
24	M.S. / 2015	Sudeshna Ray	Salient Object Segmentation in Images
25	M.S. / 2016	Nitin Gupta	Cognitive inspired framework for Smart CBIR Design
26	M.S. / 2017	Utthara G. Mangai	Methods of Decision Fusion for Texture Segmentation and Pattern Classification Tasks.
27	M.S. / 2017	Prateek Shrivastava	GPU Implementation of Virtual Cutting of Deformable Assets in Games
28	*MS / 2018	Renu Sharma	Methods of Score-level fusion in Multi-biometric Systems
29	*MS /	K S Lalitha	Unsupervised Methods for Apictorial and

	2018		Pictorial Jigsaw Puzzle Solving Problems
30	*MS / 2019	Vishnu Menon	Outlier Analysis using orthogonal constraints.
31	*MS / 2019	S. Ramya	CHECKOUT - AUGMENTED REALITY BASED DESIGN FOR VIRTUAL GARMENT/APPAREL TRIALS – An Adaptive Tool for realizing Customer Garment /apparel fits in the Digital Marketing and Fashion Discovery Industry
32	MS / 2020	Prateep Bhattacharya	Video Frame Prediction using Temporal Coherency Based Adversarial Networks
33	MS/2021	AVISHEK BHATTACHARJEE	Face Recognition through Generation using Deep Learning Techniques
34	MS/2021	SAPTAKATHA ADAK	Video Object Segmentation using Adversarial Techniques
35	MS/2021	SAYANTI BARDHAN	Saliency and co-saliency detection in images
36	MS/2021	R JANANI	Audio-Visual Event Localization in Unconstrained Videos using Deep Learning Techniques
37	MS/2021	N. P. Sandeep	Image Captioning using Deep Neural Networks which Dispense Recurrence
38	MS/2022	Sadbhavana Babar	Object Localization using Weakly Supervised Learning Paradigm
39	MS/2023	Arti Keshari	Unconditional Image and Video Generation by efficient disintegration of their attributes
40	MS/2023	Binoy K. Saha	Covert Geo-Location (CGL) Detection using Deep Learning Techniques
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- Two (2) more MS scholars currently working.
- * - Jointly guided with another faculty member.
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Sl	Degree /year	Name of PG Student	Thesis Title
1	M. Tech / 1991	S. Bandyopadhyay	An Approach to Determine the 3-D Position and Orientation of a Vehicle.
2	M.Tech / 1994	M. Kulanthaivel	Recognition of 2-D Polygonal Shapes using Pattern Specific Features.
3	M.Tech / 1994	S. R. Sharma	A study of Real Time Tracking of Moving Objects in Noisy Environments
4	M. Tech / 1994	S. Sujatha	Rendering of Simple 3D Geometrical Shapes.
5	*M. Tech / 1994	B. M. B. Tikarya	Estimation of Motion and Structure Parameters from a Sequence of Noisy Images using Kalman Filter Approach.

6	M. Tech / 1995	A. S. Arumugham	Errors in Reconstruction of a 3-D Line from Noisy Stereo Images : some Studies and Experimentation.
7	M. Tech / 1995	Anupam	Depth Map Construction from Line Correspondences in Stereo Images.
8	*M. Tech / 1995	Babu Thomas	Stereo Correspondences using Gabor Logons and Neural Networks.
9	*M. Tech / 1996	V. Somanath	Compression Techniques for Database Query Project : INQUEST.
10	M. Tech / 1996	V. K. Beri	Solid Object Modeling and Object Management for a 3-D Graphics Package: SOLIDRAW.
11	M. Tech / 1996	B. Shivaramakrishnan	Viewing and Rendering Schemes for a 3-D Graphics Package: SOLIDRAW.
12	M. Tech. / 1996	P. Narasimhamoorthy	Raster Snap Function for Vectorization of Image Maps.
13	*M. Tech / 1997	Viswam Gampala	3D Graphics Engine – An Object Oriented Approach (Visual Realism, Graphical User Interface).
14	*M. Tech / 1997	S. Chandramouleeswaran	3D Graphics Engine – An Object Oriented Approach (Scene Definition and Management).
15	*M. Tech / 1998	Ravindranathan K. R.	Unsupervised texture Segmentation Using Gabor Filters.
16	*M. Tech / 1998	Amit Kumar Agrawal	An Interactive Graphics System for the Design of Buildings : A Structured Approach.
17	M. Tech. / 1998	H. M. Rafi Assadi	Optimal Filtering Approach and Neural Network Model for Edge Detection.
18	M. Tech. / 1998	Hanumanthu R.	Fingerprint identification.
19	M. Tech. / 1998	Sunil Kumar	Ridge Orientation based Fingerprint Matching.
20	*M. Tech. / 1998	S. Jagadish	Surface Reconstruction from Planar Contours Extracted from MRI Images
21	M. Tech. / 1999	J. N. Subramanyam	Design and Development of an Image Processing Engine on X-Windows
22	M. Tech / 1999	B. V. J. Manohar	Reconstruction of Road Network from Aerial Images for GIS Applications.
23	M. Tech./ 1999	J. Rajamohan	Raster Snap function for Vectorization of Bitmap Images.
24	M. Tech. / 1999	K. S. Praneshwar Rao	Organization of Video database for Browsing and Retrieval.
25	*M. Tech. / 1999	V. Kondala Rao	Speaker Clustering using SOM.
26	M. Tech. / 1999	D. V. Bhaskar Reddy	Development of a Software Tool for the Aid of Cricket Umpires.
27	M. Tech./ 1999	G. Vidyasagar	Person Authentication Using Audio and Video Data.
28	M. Tech./ 2006 (Dual)	Pragya Minz	Navigation tool in 3D environment

29	M. Tech. / 2008	M. P. Subramanian	Content Based Video Retrieval Based on Shape and Motion Trajectory of Video Objects.
30	M. Tech./ 2008	Krishna Biswas	Design and Implementation of a Game Description language using OpenGL
31	M. Tech./ 2009 (Dual)	Nimit Jain	3-D Modeling and Realistic Image Based Rendering
32	M. Tech. / 2010 (Dual)	Naren Krishna	LDA Based Modular Eigen Analysis for Efficient Face Recognition
33	*M. Tech./ 2010 (Dual)	Shruti Srivastava	Text-to-Touch Converter System for Visually Challenged
34	M. Tech 2010 (Dual)	Harshita Khanna	Effect of Defocusing in Estimation of Orientation of Planar Textured Surface
35	M. Tech. / 2012 (Dual)	Sai Sandeep	Multi-view Face Recognition using subband faces
36	M. Tech. / 2013	Amit Kumar Marya	Spatio temporal modeling for application of video analytics
37	M. Tech. / 2013	Ankit Shrivastava	Biped Character Locomotion and Control
38	M. Tech. / 2013 (Dual)	Eswar Sai Putti	Segmentation of Multiple Foreground Objects in a Scene
39	M. Tech 2014 (Dual)	Tirumarai Selvan	Domain Adaptation for Object Categorization
40	M. Tech. / 2016 (Dual)	Venu Gopal Vangala	Neuron Cell Detection in Fluorescent Mouse Brain Scans
41	M. Tech. / 2016 (Dual)	S. Vishnu Vardhan Reddy	Classification of Subsurface Compounds Using Hyper Spectral Imaging
42	M. Tech 2020	Abhijeet Nijampurkar	SURVOnt : Ontology for Indoor Scene Understanding and Robotic Visual Surveillance
43	M. Tech 2020	DEVBRAT SHARMA	Unconstrained Face Recognition Using Semantically Aligned Deep Domain Adaptation
44	M. Tech 2020	JASMEEN KAUR	Future Frame Prediction of a Video Sequence
45	M. Tech 2020	NEHA SAH	NAVIGATIONAL AID BY SCENE MODELING USING DEPTH MAP AND SEGMENTATION CUES
46	M. Tech 2020	AARTI SHRIKISHAN TAPDIYA	Nissl Cell Segmentation in high resolution light microscopic Mouse Brain scans
47	M. Tech 2020	PRANJAL KANYAL	AR SLAM-Augmented Reality on Point Cloud with Semantic Segmentation
48	M. Tech 2021	VISHNU PRAKASH GUPTA	Future Video Frame Prediction using GAN
49	M. Tech 2021	SONU KUSHWAHA	3D object detection using Deep Learning
50	M. Tech 2021	MD SHADAN KARIM	Object Detection of Fluorescence in Mouse Brain Scans
51	M. Tech 2021	MALLEPALLI HIMASAGAR	Nissl Cell Segmentation in high resolution light microscopic Mouse Brain scans
52	M. Tech 2021	JANAKIRAM YELLAPU	Ontology for Indoor scene understanding and robotic visual surveillance
53	M. Tech 2022	RITUPARNA ADHA	Image to Image Translation for Sensor-Invariance

54	M. Tech 2022	KAUSHAL KAPADIYA	Detection of neuronal fiber in mouse brain
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Sl	Degree /year	Name of UG Student	Thesis Title
1	B. Tech. / 1995	Praveen Kumar	Image Compression techniques: A comparative study
2	*B. Tech. / 1998	Ajay Chakraborty	Traffic Flow Simulator.
3	B. Tech 1998	Chandrasekhar Yalangi	A Graphical Tool for the Aid of Cricket Umpires.
4	*B. Tech. / 2007	J. Deepak	Procedural Texture Synthesis and 3D Surface Wrapping
5	B. Tech. / 2008	Mahesh Kumar Reddy	A Real-time Face Recognition System using Modular PCA approach
6	B. Tech. / 2009	Ravi Teja	Image Enhancement, Segmentation and Pose Estimation in Videos.
7	B. Tech. / 2010	N. Hari Prasad	Study of Foreground Image Segmentation using Support Vector Machines
8	B. Tech / 2012	SASI INGUVA	Tracking of Multiple Objects using Segmentation and Object Detection
9	B. Tech. / 2017	K. Riwtika	Image Scene Ontology Creation for Scene Representation
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< * also see in table earlier, Dual degree candidates guided – for students awarded joint B. Tech and M. Tech degrees * >

* -- Guided jointly with another faculty member (Co-guide).

Currently, guiding **SIX (6) Ph. D., Two (2) M.S. Scholars, six(6) BTP students.**

9. Courses introduced (mostly new*) and modified:

CS 6350	Computer Vision*	(1994, modified 2005/12/18)
CS 6710	Advances in Visual Perception*	(July 2005)
CS 6870	Digital Video Processing*	(Oct. 2008)
CS 6489	Modern Trends in Computer Graphics*	(July 2012)
CS 6360	Computer Graphics	(modified 2011/18)
CS 6777	Optimization Methods for Computer	(June 2014)

Vision Applications*

CS 6464	Concepts in Statistical Learning Theory*	2016
		(modified 2018)
ID7123	Machine Intelligence and Brain Research*	2017

10. Lab/Design/Development Activity :

- (i) **VISUALIZATION and PERCEPTION Laboratory** was established and set up in August 2004;
(URL: //www.cse.iitm.ac.in/~vplab/).
- (ii) Faculty in-charge of departmental computing facility (DCF), from 2003-2005.
- (iii) Faculty in-charge - Classroom Electronic facility – PC + projection + PA system; 2004-2011.
- (iv) VICOGSA (VIsual COGnitive Smart Agent) lab. – under IMPRINT (MHRD and DRDO) funding – 2018-22.

11. Projects undertaken:

(a) **Sponsored:** (Prior to year 2004)

Agency	Value	Title	Other Coordinators	Year
ONR, USA	Rs. 19.00 Lakhs	&&	Prof. B. Yegnanarayana	1998-2001
ISRO, INDIA	Rs. 7.80 Lakhs	##	Prof. B. Yegnanarayana, Dr. Koshy Varghese	1997-2000
INTEL ASIA	Rs. 60.00 Lakhs	@@	Prof. B. Yegnanarayana Dr. C. Chandrasekhar Dr. Hema A Murthy	1999-2004
ISRO, INDIA	Rs. 1.00 Lakhs	**	Prof. B. Yegnanarayana	1998-9

&& - Information Recovery from Partial Data for Image Processing Applications.

- Development of techniques for Classification of Urban Features from remote Sensed Data for use in GIS Applications : A Multi-disciplinary approach.

@@ - Development of Phonetic Engine for Speech in Indian Languages.

** - Neural Network Models for Health Monitoring of Propulsion Systems.

Since year 2004:

Agency	Value	Title	Whether as PI	Year
MHRD (GOI)	Rs. 20.80 Lakhs	&&	YES	2004-6
DRDO (GOI)	Rs. 10.00 Lakhs	\$\$	YES	2004-6
DRDO (GOI)	Rs. 22.92 lakhs	**	YES	2004-6
MCIT (GOI)	Rs. 39.60 Lakhs	%%	NO	2005-7
DST (GOI)	Rs. 14.04 Lakhs	§§	NO	2005-7
DRDO (GOI)	Rs. 9.85 Lakhs	@@	YES	2006-7
DRDO (GOI)	Rs. 9.95 Lakhs	##	YES	2007-9
MCIT (GOI)	Rs. 40.4 Lakhs	++	NO	2008-11
ICMR (Indo-German)	Rs. 15.00 lakhs	!!	NO	2008-10
MCIT (GOI)	Rs. 104.0 Lakhs	~~	NO	2009-12
MHRD (IMPRINT-MHRD/DRDO)	Rs. 187.0 Lakhs	ΘΘ	Yes	2017-22

- && - Multi-modal biometrics based secured access system using face and fingerprint recognition.
- \$\$ - SAR image exploitation, Classification of Man-made and Natural regions, Automatic Target Detection.
- ** - Probabilistic Classification of Satellite Images to Obtain Landform Patterns.
- %% - Minimal Object Oriented Linux.
- §§ - Integration Knowledge system on soil Nutrient management through Image Processing of Chromatograms.
- @@ - Recovery of 3D shapes based on multiview textures.
- ## - Combining Classifiers using Decision Fusion: An approach to Probabilistic Landform Segmentation.
- ++ - Research and Development of Multi-camera algorithms for security and surveillance.
- !! - Telemedicine station for Rural Health Monitoring and diagnosis of epidemic diseases.
- ~~ - Service Oriented Architecture and its implementation for the Linux Kernel, middleware (NRCFOSS Phase II).
- ΘΘ - Scene Understanding for Identification of covert Geo-locations in a scene, using a Hyper-Classifer based Visual Intelligent system.

(b) Consultancy :

Agency	Value	Title	Other Coordinators	Year
PGG, Nuenkirchen, Germany.	Rs. 2.5 lakhs	**	Prof. B. Yegnanarayana (PI)	1994-6
HCL Technologies, India	Rs. 0.45 Lakhs	&&	NIL	2000-01
Metricone Technologies, India	Rs. 1.0 Lakhs	@@	NIL	2001
HCL	Rs. 0.40 Lakhs	%%	NIL	2001

Technologies, India.

ATB, (GOI) Secunderabad	Rs. 15.00 lakhs	++	Dr. Anurag Mittal	2008-9
DRDO (GOI)	Rs. 9.98 Lakhs	'''	Prof. T. S. Natarajan (Deptt. of Phys.)	2009-11
DRDO (GOI)	Rs. 45.00 Lakhs	##	Dr. Sutanu Chakraborti	2011-14
Nathan Research Chennai	Rs. 7.2 Lakhs	??	Nil	2020-21
Cloud Physician Bangalore	Rs. 2.5 L	!!	Nil	2020-21
Manatech Pondicherry	Rs. 15.7 L	^^	Nil	2023-24

- ** - Image Processing algorithms for GIS.
- && - Algorithms for Simulation and Image Analysis
- @@ - Algorithms for Fingerprint Identification
- %% - Traffic Signal Identification
- ++ - Sizing of Sensors for Tracking Trainee Movements in Simulation Arena.
- |'''| - Smart segmentation of objects in images
- ## - Localization and Identification of targets in Satellite Images using Feature based approaches.
- ?? - Identification and Detection of spatial layouts of fixed set of fixtures in images.
- !! - Technical Proposal for your Consultancy Services for Collaborative Research on Analyzing ventilator images to detect respiratory abnormalities.
- ^^ - Wheel Alignment Software

12. Text Books, Monographs, etc. Authored :

- Co-editor of the LNCS (Springer) proceedings of the 8th

International Conference on Human Computer Interaction, IHCI 2016, Pilani, India, December 12-13, 2016.

- Co-editor of the IEEE proceedings of the Fourth National Conference on "Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG)", IIT Jodhpur, Rajasthan, India, 18-21 December 2013.
- Co-Editor of the Proceedings of International Conference on Multimedia Processing and Systems (ICMPS '2000), IIT Madras, Chennai, India, during August 13-15, 2000.

13. CEC programs and Conferences organized :

- (a) CEC Short-term course on "**Computer Graphics and Image Processing**", conducted at IIT Madras during 18-19th, April, 1997, for Industries and Academic Institutions, with Dr. Hema A Murthy.
- (b) Co-convener of the **International Conference on Multimedia Processing and Systems**, IIT Madras, Chennai, during August 13-15, 2000.
- (c) Faculty convener on the **IBM-day** event held in IIT Madras, on August 11, 2007; TCS Research Day at IIT Madras, Oct. 2016.
- (d) DRDO-sponsored International Workshop (CEC program) on "**DIGITAL VIDEO ANALYTICS and PROCESSING (DVAP-2012)**", held at IC&SR, IIT Madras, 21-22, Dec. 2012.
- (e) **Program co-chair of NCVPRIPG-13**, held at IIT Jodhpur, Dec. 2013.
- (f) **Faculty Convener of TCS Interaction day event, held at IIT Madras, Oct. 01, 2016; IC&SR, IIT Madras.**
- (g) **Program co-chair of IHCI-2016**, held at CEERI/BITS Pilani, Dec. 2016.
- (h) **Organizing Chair of Workshop on LIVOR (Learning Issues in Visual Object Recognition)**, organized at IIT Jodhpur, July 2023.

14. Awards/Honours Received & **Highlights:**

(i) **Winner (best design) at the design contest of "SOPC World" event on Embedded Systems and VLSI systems**, conducted by ALTERA in Bangalore, 2004; jointly with Dr. V. Kamakoti and Pavan Kumar.

(ii) **Best paper award** at National Conference on Image Processing (NCIP '05), Bangalore, for Vinod Pathangay and Dr. Sukhendu Das for their work published in the paper entitled "Exploring the use of selective Wavelet Subbands for PCA based Face Recognition", March 2005.

(iii) **Best paper** at National Conference on Computer Vision, AI and Robotics (NCCVAIR '07), at Chennai, awarded to Sunando Sengupta and Dr. Sukhendu Das for their work published in the paper entitled "Error Norm for Determining 3D Structure from Different Appearances of an Object", October 2007.

(iv) "An integrated multi-stage framework for automatic road extraction from high resolution satellite imagery" published in Journal of Indian Society of Remote Sensing 39 (1): 1-26; Authors: Mirnalinee, TT, Das, S and Varghese, K; **is adjudged as the best paper**. The award ceremony was held during the inaugural session of National Symposium on "Space technology for food and environment security" at NASC complex, Devi Prakash Marg near IARI, New Delhi on 5th Dec. 2012.

(v)

"VIDLOOKUP: A web-based online CBVR system for query video shots"

**Among the top 12 selected Demos,
at the (IEEE) International Conference on Computer Vision
(IEEE-ICCV) 2011; rated A*; h5-index - 89;
Barcelona, Spain.**

(vi) Finalist (among the top 9 short-listed papers) for the best paper award, at the IEEE-**ICIP**'14 Conference, held at Paris, France, Oct. 2014.

(vii) **Best student paper award** in 16th International Conference on Advanced Concepts for Intelligent Vision Systems (ACIVS), Poitiers, France, 24-27 September, 2018.

(viii) **Best Student paper award** in 26th International Conference on Neural Information Processing (**ICONIP**) – Rank A; Sydney, Australia, December 12-15, 2019.

(ix) **Best Student paper award** in Winter Conference on Applications of Computer Vision (**WACV**) [rank A | h5-index - 62 (2021)], Snowmass Village, Colorado, USA, March 2-5, 2020.

Three MS students won **5 best thesis awards 2021-23**.

15. Professional Societies involved: IEEE, USA (Computer and SMC).

Reviewed technical papers for the following international Conferences/journals (from 2004 till date):

- (i) **CVPR, ICCV, NIPS, ICML, ICLR, WACV, ICVGIP**
- (ii) **IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI)**
- (iii) **IEEE Transactions on Image Processing (T-IP)**
- (iv) **IEEE Transactions on Systems, Man and Cybernetics (T-SMC)**
- (v) **International Journal of Computer Vision (IJCV)**
- (vi) **Pattern Recognition Letters (PRL).**
- (vii) **Journal of Information Fusion**
- (viii) **International Journal of Biomedical Imaging**
- (ix) **Signal Processing**
- (x) **Pattern Recognition**
- (xi) **Neuro-Computing**
- (xii) **Fuzzy Sets and Systems**
- (xiii) **Image and Vision Computing**
- (xiv) **IET – Transactions on Image processing**
- (xv) **IET – Computer Vision**

16. Research work in progress – planned/unplanned:

- (a) Analyzing video sequence for **Prediction, tracking, estimation, detection and reconstruction of moving objects and CBVR** (representation, event analysis and Retrieval)
- (b) **Deep learning** models for face, object and event categorization, under constrained environments – very less annotated training set, cluster, shadows, glare, camouflage etc. .
- (c) **Face Recognition** in unconstrained environments (e.g. classroom, public gathering) from degraded (low quality) snaps and spoof.
- (d) **Computational models and structure analytics from Brain scan data.**
- (e) **Visual Ontology** - description of scenes, VQA, VSG.
- (f) **Foreground salient object detection**, from images and video
- (g) Generic Scene classification, using perceptual models
- (h) **Edge preserving super-resolution.**
- (i) **Smart object-centric Segmentation** based on human perceptual cues – SLAR based.

- (j) **Deep Domain Adaptation** for visual object categorization and recognition.
- (k) Video Analytics; Video Informatics; Intelligent Eye **and SIXTH SENSE INTELLIGENCE.**

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2.69). "A Fast Supervised Method of Feature Ranking and Selection For Pattern Classification", Suranjana Samanta and Sukhendu Das; 3rd International Conference on Pattern Recognition and Machine Intelligence (PREMI'09), LNCS 5909, IIT Delhi, Dec. 16-20, 2009, pp. 80-85.

2.70). "Human Motion Tracking and Pose Estimation in varying Illumination Conditions using Single View", Himanshu Prakash jain, Sukhendu Das, Anurag Mittal and Binay Raj; National Conference on Computer Vision, Pattern Recognition, Image processing and Graphics (NCVPRIPG '10), Jaipur, India, January 15-17, 2010.

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International Conference (LNCS) on Pattern Recognition and Machine Intelligence (PreMI-2013), pp 74-81, December 10-14, 2013, Kolkata, India, DOI: 110.1007/978-3-642-45062-4_9. Work partly supported by TCS Innovation Lab (India).

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2.83). "Spatial Variance of Color and Boundary Statistics for Salient Object Detection", Sudeshna Roy and Sukhendu Das; National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG-2013), Jodhpur, India, 19-21 December 2013.

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2.92). "GPU Based Particle Coding Scheme for Virtual Cutting of Meshfree Particle System", Prateek Shrivastava and Sukhendu Das; In Proceedings of the 10th International Symposium on Visual Computing (ISVC-2014), Las Vegas, Nevada, USA, December 8-10, 2014.

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2.94). "Method of particle coding for Meshfree cutting of soft objects", Prateek Shrivastava and Sukhendu Das; ACM proceedings of the 9th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP-2014), IISC Bangalore, Karnataka, India, December 14-18, 2014.

2.95). "Revealing What to Extract from Where for Object-Centric Content Based Image Retrieval (CBIR)", Nitin Gupta, Sukhendu Das and Sutanu Chakraborti; ACM proceedings of 9th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP-2014), IISC Bangalore, Karnataka, India, December 14-18, 2014.

2.96). "Multi-criteria Energy Minimization with Boundedness Edge-density and Rarity for Object Saliency in Natural Images", Sudeshna Roy and Sukhendu Das; ACM proceedings of the 9th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP-2014), IISC Bangalore, Karnataka, India, December 14-18, 2014.

2.97). "Domain Adaptation Using Weighted Sub-space Sampling For Object Categorization", Tirumarai Selvan, Suranjana Samanta and Sukhendu Das; IEEE proceedings of 8th International Conference on Advances in Pattern Recognition (ICAPR-2015), ISI Kolkata, India, January 4-7, 2015.

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2.99). "Unsupervised Method of Domain Adaptation on Representation of Discriminatory Regions of the Face Image for Surveillance Face Datasets", Suranjana Samanta, Samik Banerjee and Sukhendu Das; In ACM proceedings of the International Conference on Perception and Machine Intelligence (PerMin-2015), Kolkata, India, February 26-27, 2015.

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2.102). "Score Normalization in Multimodal Systems using Generalized Extreme Value Distribution", Renu Sharma, Sukhendu Das and Padmaja Joshi, 26th **British Machine Vision Conference (BMVC '15)**, Swansea, UK, Sept. 7 - 10, 2015.

2.103). "Rank Level Fusion in Multibiometric Systems", Renu Sharma, Sukhendu Das and Padmaja Joshi, in 5th National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG '15), IIT Patna, India, December 16-19, 2015.

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2.108). "Eigen Domain Transformation for Soft-margin Multiple Feature-Kernel Learning for Surveillance Face Recognition ", Samik Banerjee and Sukhendu Das; In 2nd Workshop on Computer Vision Applications, 10th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIPW) Workshops, IIT Guwahati, India, December 18-22, 2016.

2.109) "Video Stabilization by Procrustes Analysis of Trajectories"; Geethu Miriam Jacob and Sukhendu Das; In Tenth Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP-2016), IIT Guwahati, India, December 18-22, 2016. DOI:10.1145/3009977.3009989

2.110). "Graph-based Clustering for Apictorial Jigsaw Puzzles of Hand Shredded Content-less Pages"; Lalitha K S, Sukhendu Das, Arun Menon, Koshy Varghese; In 8th International Conference on Intelligent Human Computer Interaction (IHCI-2016), CSIR-CEERI, BITS Pilani, India, December 12-13, 2016.

2.111). "Deep Learning Methods for the Automated Detection of cells in Nissl Stained Mouse Brain Scans", Girraj Pahariya, Madhumita Harish, Sukhendu Das, Jayakishan Jayakumar and Partha P Mitra, In Second Workshop on Computational Brain Research, IIT Madras, India, January 3-7, 2017.

2.112). "Moving Object Segmentation in Jittery Videos by Stabilizing Trajectories Modeled in Kendall's Shape Space", Geethu Miriam Jacob and Sukhendu Das, 28th **British Machine Vision Conference (BMVC '17)**, London, UK, September 4-7, 2017.

2.113). "Performance of Deep Learning Algorithms vs. Shallow models, in extreme conditions - some empirical studies", Samik Banerjee, Prateep Bhattacharjee and Sukhendu Das, (oral presentation) 7th International Conference on Pattern Recognition and Machine Intelligence (PReMI'17), ISI Kolkata, India, December 5-8, 2017.

2.114). "Two-Stream Convolutional Network with Multi-level Feature Fusion for Categorization of Human Action from Videos", Prateep Bhattacharjee and

Sukhendu Das; (oral presentation) 7th International Conference on Pattern Recognition and Machine Intelligence (PReMI'17), ISI Kolkata, India, December 5-8, 2017.

2.115). "Temporal Coherency based Criteria for Predicting Video Frames using Deep Multi-stage Generative Adversarial Networks", Prateep Bhattacharjee and Sukhendu Das, In the 31st Conference on Advances in Neural Information Processing Systems (NIPS) [Core rank - A* | h5-index – 245, Rank-12 (2021)], Long Beach, California, United States of America, December 4-9, 2017; # citations - 48 (Jan. 2022).

2.116). "PosIX-GAN: Generating multiple poses using GAN for Pose-Invariant Face Recognition.", Avishek Bhattacharjee, Samik Banerjee and Sukhendu Das, In Geometry Meets Deep Learning (GMDL), 15th European Conference on Computer Vision Workshops (ECCVW), Munich, Germany, September 8-14, 2018.

2.117). "Context Graph based Video Frame Prediction using Locally Guided Objective", Prateep Bhattacharjee and Sukhendu Das, In Anticipating Human Behavior (AHB), 15th European Conference on Computer Vision Workshops (ECCVW), Munich, Germany, September 8-14, 2018. [*Oral presentation*]

2.118). "GreenWarps: A Two-Stage Warping Model for Stitching Images using Diffeomorphic Meshes and Green Coordinates", Geethu Miriam Jacob and Sukhendu Das, In Women in Computer Vision (WiCV), 15th European Conference on Computer Vision Workshops (ECCVW), Munich, Germany, September 8-14, 2018.

2.119). "Deep Domain Adaptation for Face Recognition using images captured from surveillance cameras", Samik Banerjee, Avishek Bhattacharjee and Sukhendu Das, In IEEE Conference on Biometric Special Interest Group (BIOSIG), Darmstadt, Germany, September 27-28, 2018.

2.120). "Large Parallax Image Stitching Using an Edge-Preserving Diffeomorphic Warping Process", Geethu Miriam Jacob and Sukhendu Das, In International Conference on Advanced Concepts for Intelligent Vision systems (ACIVS), LNCS (Springer), Poitiers, France, September 24-27, 2018. DOI:10.1007/978-3-030-01449-0_44 [**Best Student Paper Award**].

2.121). "Panorama from Representative Frames of Unconstrained Videos Using DiffeoMeshes.", Geethu Miriam Jacob and Sukhendu Das, in 14th Asian Conference on Computer Vision (ACCV), Perth, WA, Australia, December 2-6, 2018.

2.122). "Predicting Video Frames using Feature Based Locally Guided Objectives.", Prateep Bhattacharjee and Sukhendu Das, in 14th Asian

Conference on Computer Vision (ACCV), Perth, WA, Australia, December 2-6, 2018. [*Oral presentation*]

2.123). "SpoofNET: Resolving facial makeup based spoofs.", Avishek Bhattacharjee, Samik Banerjee and Sukhendu Das, 11th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), Hyderabad, India, December 18-22, 2018.

2.124). "DP-GAN: Dual Pathway Generative Adversarial Network for Face Recognition in degraded scenarios.", Avishek Bhattacharjee, Samik Banerjee and Sukhendu Das, 11th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), Hyderabad, India, December 18-22, 2018.

2.125). "A Bottom-Up and Top-Down Approach for Image Captioning using Transformer.", Sandeep Narayan Parameswaran and Sukhendu Das, 11th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), Hyderabad, India, December 18-22, 2018 (*oral Presentation*).

2.126). "VidSeg-GAN: Generative Adversarial Network for Video Object Segmentation Tasks.", Saptakatha Adak and Sukhendu Das, 11th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), Hyderabad, India, December 18-22, 2018.

2.127). "TempSeg-GAN: Segmenting Objects in Videos Adversarially using Temporal Information", Saptakatha Adak and Sukhendu Das; In 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISAPP part of VISIGRAPP), Prague, Czech Republic, February 25 - 27, 2019, pp.221-232, DOI:10.5220/0007254302210232.

2.128). "Directional Attention based Video Frame Prediction using Graph Convolutional Networks.", Prateep Bhattacharjee and Sukhendu Das; in International Joint Conference on Neural Networks (IJCNN), Rank - A (Oral Presentation); Budapest, Hungary, July 15-19, 2019.

2.129). "What's there in the Dark", Sauradip Nag, Saptakatha Adak and Sukhendu Das; In 26th IEEE International Conference on Image Processing (ICIP), Taipei, Taiwan, September 22-25, 2019, pp.2996-3000 DOI:10.1109/ICIP.2019.8803299.

2.130). "Visual Saliency Detection via Convolutional Gated Recurrent Units", Sayanti Bardhan, Sukhendu Das and Shibu Jacob; in 26th International Conference on Neural Information Processing (ICONIP) – Rank -A; Sydney, Australia, December 12-15, 2019.

2.131). "Motion-based Occlusion-aware Pixel Graph Network for Video Object Segmentation", Saptakatha Adak and Sukhendu Das; in 26th International

Conference on Neural Information Processing (**ICONIP**) – **Rank -A**; Sydney, Australia, December 12-15, 2019 [**Oral; Best Student Paper Award**].

2.132). "SACIC: A Semantics-aware Convolutional Image Captioner using Multi-Level Pervasive Attention", Sandeep Narayan Parameswaran and Sukhendu Das; in 26th International Conference on Neural Information Processing (ICONIP) – Rank -A; Sydney, Australia, December 12-15, 2019.

2.133). "See the Sound, Hear the Pixels ", Janani Ramaswamy and Sukhendu Das; Winter Conference on Applications of Computer Vision (**WACV**) – **Rank A**; Colorado, USA, March 2-5, 2020 [**Oral; Best Student Paper Award**].

2.134). "Where to Look?: Mining Complementary Image Regions for Weakly Supervised Object Localization", Sadbhavana Babar and Sukhendu Das; Winter Conference on Applications of Computer Vision (**WACV**) – **Rank A**, Virtual, Jan 5-9, 2021; [work sponsored under IMPRINT grant].

2.135). "Wavelet Residual Learning for Efficient Future Frame Prediction from Natural Video Sequences", Sonam Gupta and Sukhendu Das, In 9th International Conference on Pattern Recognition and Machine Intelligence (PReMI'21), Kolkata, India, December 15-18, 2021 [Oral].

2.136). "G3AN++: Exploring Wide GANs with Complementary Feature Learning for Video Generation", Sonam Gupta, Arti Keshari and Sukhendu Das, In 12th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 20-21), IIT Jodhpur, India, December 2021. [Oral presentation].

2.137). "V3GAN: Decomposing Background, Foreground and Motion for Video Generation", Arti Keshari, Sonam Gupta, and Sukhendu Das, In the 32nd British Machine Vision Conference (**BMVC 2021**), Online 22nd - 25th November 2021.

2.138). "Catch Me if You Can: A Novel Task for Detection of Covert Geo-Locations (CGL)", Binoy Saha, Sukhendu Das; In fourth workshop on Computer Vision Applications, 12th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIPW 20-21), IIT Jodhpur, India, December 2021. [work sponsored under IMPRINT grant].

2.139). "Controllable Image Synthesis via Feature Mask Coupling using Implicit Neural Representation", Sonam Gupta, Arti Keshari, Sukhendu Das. In the 12th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2022) IIT Gandhinagar 8th - 10th December 2022. DOI: 10.1145/3571600.3571646.

2.140). "Navigational Aid for Open-Ended Surveillance, by Fusing Estimated Depth and Scene Segmentation Maps, Using RGB Images of Indoor Scenes",

Binoy Saha, Neha Shah, Sukhendu Das; In IEEE International Conference on Signal Processing and Communications (SPCOM-2022), IISC Bangalore, India, July 2022. [work sponsored under IMPRINT grant].

2.141). "RV-GAN: Recurrent GAN for Unconditional Video Generation", Sonam Gupta, Arti Keshari, and Sukhendu Das; In Workshop on Women in Computer Vision (WiCV), Computer Vision and Pattern Recognition (CVPRW 2022) Workshops; June 2022, New Orleans, USA.

2.142). "MARRS: Modern Backbones Assisted Co-training for Rapid and Robust Semi-Supervised Domain Adaptation", Saurabh Kumar Jain, Sukhendu Das. In Efficient Deep Learning for Computer Vision, Computer Vision and Pattern Recognition (**CVPR 2023**) **Workshops**; June 2023, Vancouver, Canada.

2.143). Conditioning Covert Geo-Location (CGL) Detection on Semantic Class Information", Binoy Saha, Sukhendu Das. In 10th International Conference on Pattern Recognition and Machine Intelligence (PReMI 2023); December 2023, ISI Kolkata, India (Work supported by IMPRINT-GoI grant, 2017-22).

2.144). "Single View Homography Estimation for an Inclined Textured Planar Surface: Overcoming the Inverse and Ill-Posed Challenge!", Pooja Kumari, Sukhendu Das. In Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2023); December 2023, IIT Ropar, India.

2.145). "Stochastic Binary Network for Universal Domain Adaptation", Saurabh Kumar Jain, Sukhendu Das. In the Winter Conference on Applications of Computer Vision (**WACV**), WAIKOLOA, HAWAII, Jan 4-8, 2024. [**Rank A, Oral presentation**].

18. Additional Information and responsibilities - academic and extra-curricular:

- i) **Senior Member, IEEE, USA.**
- ii) **Editorial Board of Sadhana (Springer series) journal.**
- iii) **Program Co-chair of NCVPRIPG-13** Conference, held at IIT Jodhpur, Dec. 18-21, 2014.
- iv) **Chairman, PRSG review committee** for the **Ministry of Communications and Information Technology (GOI) project** entitled "Robust Watermarking of Digital Images using Wavelet like Transforms for Image Security"; Univ. of Madras, Chennai, India, 2005-08.

- v) **Chairman, PRSG review committee** for the **Ministry of Communications and Information Technology (GOI) project** entitled "An investigation on the impact of encoding schemes in Steganography and Watermarking algorithms"; Andhra University, Vishakapatnam, India, 2009-10.
- vi) **Chairman, PRSG review committee** for the **Ministry of Communications and Information Technology (GOI) project** entitled "Development of algorithms for matching near-infrared facial images to visible light images in uncontrolled scenarios" being implemented by **IISc Bangalore**, 2016-17.
- vii) Member of PRSG review committee for the **Ministry of Communications and Information Technology (GOI) project** entitled "Research on Multimodal Context Switching using multi-spectral Face, Periocular and Iris recognition at a distance" being implemented by **IIIT Delhi**; 2014-17.
- viii) Member, PRSG review committee for the **Ministry of Communications and Information Technology (GOI) project** entitled "Design of New Iris Recognition System for Personal Authentication with Orthogonal Polynomials Model" by Bharathidasan Institute of Technology, Anna University, Tiruchirappalli; India, 2009-11;
- ix) Member, review committee for the **DST project** entitled "Video Surveillance", at IISc Bangalore, since 2012.
- x) Member of the **GIES-IMINT project review board in ADE, DRDO, Bangalore**, 2004-2006.
- xi) Member of the DRDO-RAC Recruitment and Assessment Board/Committee, DRDO (Delhi), since 2006.
- xii) NPTEL (MHRD program) video lecture series in "Computer Graphics" (available in Doordarshan – Ekalvya Channel and now on Youtube), completed in Sept. 2005; **9th most viewed Video lecture on Youtube, 2010; most viewed (in 2009) among all courses in Computer Science and Engg. field.**
- xiii) NPTEL-Phase II - (a) Discipline (course) Coordinator in Computer Science and Engg., IIT Madras, Chennai – 36, since 2009; (b) Co-instructor of the video lecture series in "Pattern Recognition".
- xiv) CSE faculty incharge of classrooms, Course Allocation, TA Allocation, QIP/Sponsored interviews etc., 2006-16.
- xv) Department (CS&E) faculty representative in the Institute Board of Academic Courses (BAC member, Deptt. Of CS&E, IIT

Madras), 2005-2007.

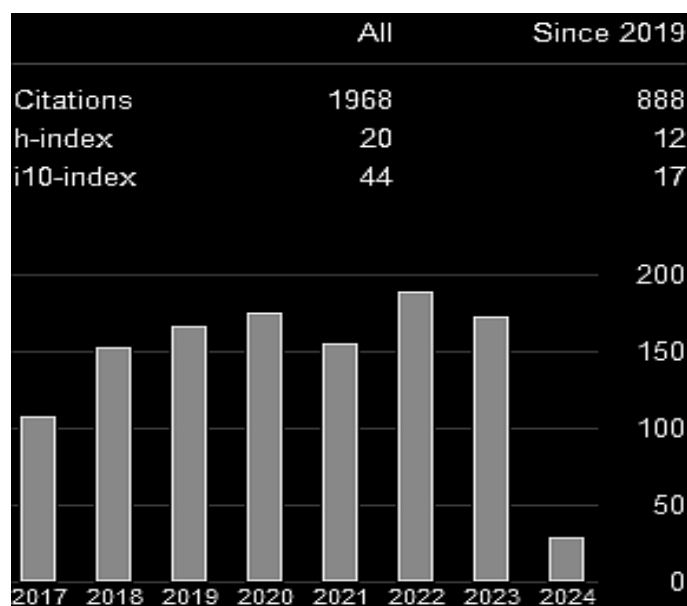
- xvi) Department (CS&E) Faculty representative in the IIT time-table committee, 2004-2007.
- xvii) Department (CS&E) faculty representative in the Institute Board of Training and Placement (BT&P member, Deptt. Of CS&E, IIT Madras), 2008-09, 2011-2013.
- xviii) Appointed as the General Secretary of the Staff Club, IIT Madras, 2004-2006; Also, served earlier as executive committee member and Sports secretary of Staff Club, IIT Madras.

19. Top 10 significant Publications, with most Citations (Jan. 2023):

<u>Title</u>	<u>Cited by</u>	<u>Year</u>
A survey of decision fusion and feature fusion strategies for pattern classification UG Mangai, S Samanta, S Das , PR Chowdhury IETE Technical review 27 (4), 293	368	2010
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Annexure:

<**EMAIL extract **> I owe a lot to IITM for an excellent BTech education and a superb peer group of students that gave me a good start. Special thanks to my CS professors such as you, CPR, CSRM, Mahabala, Janakiram, Chandrasekhar, KK (both Ks!),

[Sukhendu Das](#), etc. for creating a good foundation.

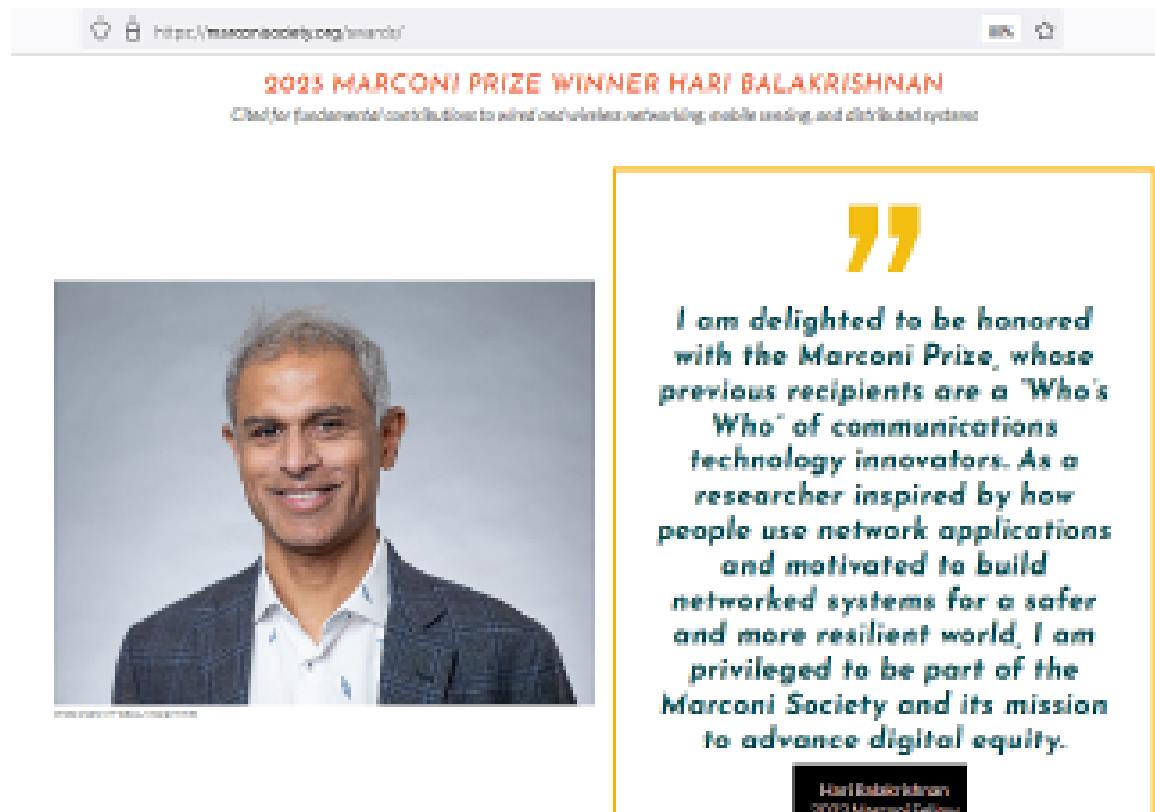
It's good to see the CS department grow in strength.

Hari


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Brief Biodata

Dr. **Sukhendu Das** is currently employed as a Professor in the Deptt. Of Computer Science and Engg., IIT Madras, Chennai, India. He completed his B.Tech degree from IIT Kharagpur in the Deptt. Of Electrical Engg. in 1985 and M. Tech Degree in the area of Computer Technology from IIT Delhi in 1987. He then obtained his Ph.D degree from IIT Kharagpur in 1993. His current areas of research interests are: Visual Perception, Computer Vision: Digital Image Processing and Pattern Recognition, Computer Graphics, Machine Learning and Artificial Neural Networks, Computational Sc. & Engg., Soft Computing, Deep Learning and Computational Brain modeling. Dr. Sukhendu Das has been a faculty of the Deptt. of CS&E, IIT Madras, INDIA since 1989. He has worked as a visiting scientist in the University of Applied Sciences, Pforzheim, Germany, for post-doctoral research work, from Dec. 2001 till May 2003; and as a visiting fellow/scientist in the Univ. of UWA, Perth, Australia, during June-Aug. 2006, and July-Sept. 2008. He has guided more than 100 students - 8 (currently guiding 5) Ph. D., 38 (currently guiding 5) M.S., 54 M. Tech and 9 B. Tech students. He had completed several international and national sponsored projects and consultancies, both as principle and co-investigators. He has published **~190 technical papers (with ~2000 citations – src: google scholar)** in international and national journals and conferences. He has reviewed several papers in international journals (IEEE, IET, Elsevier, Springer etc.), Conferences (CVPR, ICCV, NIPS, ICLR, ICML, WACV, ICVGIP) and had chaired several sessions in conferences. He is a senior member of IEEE, and has received **six (6) best papers and a best design contest award**. Significant and novel technical contributions are: **MSGAN & GCDN** for Video prediction; **MST-CSS** representation for CBVR tasks; **SUBBAND** face, **3-MET** on **Deep-DA/transfer-CNN**, **LR-GAN**, Eigen-domain transformation (**EDT**), Eigen-scale space (**ESS**) representations for face-based biometry; Outdoor Surveillance (MCIT, GOI) and classroom face datasets; **CGL** detection and Manifold based alignment for optimization using DA, for applications in face, object & video categorization tasks.