

Resume

- **Name and full correspondence address:** Dr. A V Narasimhadhan, Associate Professor, Department of Electronics and Communication, National Institute of Technology Karnataka, Surathkal-575025, Mangalore, Karnataka, INDIA.
- **Email(s) and contact number(s):** Tel: +91-8792634681, Email: dhan257@gmail.com, dhansiva@nitk.edu.in
- **Institution:** National Institute of Technology Karnataka, Surathkal
- **Date of Birth:** 01-06-1982
- **Gender:** M
- **Category:**General
- **Whether differently abled (Yes/No) :**No

Academic Qualification

- Doctoral of Philosophy (Ph.D) 2012
Indian Institute of Science (IISc), Bangalore, India
Thesis Title: Image Reconstruction based on Hilbert and Hybrid filtered algorithms with inverse distance weight and no backprojection weight.
- Master of Technology (M.Tech)
Indian Institute of Technology (IIT), Guwahati, india, 2005-2007
Thesis Title: Signal Processing Methods for Acoustic Doppler Current Profiler.
- Bachelor of Engineering (B.E)
Andhra University (Campus), Visakapatnam, India, 2001-2005
Project Title: Adhoc routing Protocols in Computer Networks.
- Diploma (Honors) in Electronics and Communication Engineering(DECE)
Govt Polytechnic of Mahaboob Nagar, Mahaboob Nagar, A. P, India, 1997-2000.
- Secondary School Certificate
Loyala High School, Vinukonda, A. P, India, 1997.

Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award:

- Ph.D. Thesis Title: Image Reconstruction based on Hilbert and Hybrid filtered algorithms with inverse distance weight and no backprojection weight.
- Guide's Name: Prof. Rajgopal Kasi
- Institute/Organization/University: EE, IISc Bangalore
- Year of Award: 2012

Work Experience

- Research Associate, IISc, Bangalore, March 2012-July 2012, Pay scale 20,000/--(Consolidated)
- Assistant Professor, NIT Goa, July 2012-Mar 2013, Pay scale: 35,000/- (Consolidated)
- Assistant Professor, NITK Surathkal, April 2013-Till Date, Pay scale 30,000+8000 (Level-12)

Area of Interest

- Machine Learning
- Image processing
- Medical Imaging
- Computer Vision
- Speech Processing
- Digital Signal Processing
- Microwave Engineering
- Quantum Computing

Invited Talks

- Introduction to image classification: Unsupervised and Supervised, 24th July, 2019, NITK Surathkal
- Generative Adversarial Networks and its Application in Image Segmentation, 6th November, 2020, IIIT Kottayam, Kerala
- Principal component analysis and autoencoder, 4th Feb, 2021, RV Engineering College, Bangalore.
- Generative Adversarial Networks and its Application to fundus image segmentation, 2021, NIT Puducherry
- Generative Adversarial Networks and its Application to fundus image segmentation, 2022, Reva University
- FRI Sampling and Reconstruction and its application, 2022, Laki Reddy Bala Reddy college, Andhra Pradesh

Session Chair

- VSPICE held between 23rd to 24th May 2019, N.M.A.M institute of technology, NITTE.
- MDCWC2020 held between 22nd to 24th October 2020, NITK Trichy.
- Technical Session on “Computers and Mathematical Modelling”, International Conference on Computational Methods in Engineering and Health Sciences held between 2nd and 3rd October 2023, MIT Manipal.

Professional Training Received

- Attended the Faculty training Programme on Teaching Learning Methodologies organised by the Teaching Learning Centre, Centre for Continuing Education, IIT Madras, 2012
- Attended a National Workshop on Optics and Photonics for Engineering Applications, Optical Flare 2013, NIT Goa.
- Attended the workshop on Induction Training Programme for Newly Recruited Faculty Organized by TEQIP-II, NIT K Surathkal, 2013.
- Attended the Faculty Development Program conducted by NITK STEP, 2013.
- Attended the Course on Mathematical Morphology and its applications in Image processing Conducted by NITK, 2015.
- Attended the Course on Optimization Techniques for Signal Processing and Network Communication Conducted by NITK, 2018.

International Conferences Attended

- Presented a paper at International conference on Fully 3D Meeting and 2nd HPIR Workshop at Beijing, China during September 2009.
- Presented a paper at 2-Day International Symposium on Medical Imaging: Perspectives on Perception and Diagnostics during December 2010 at IIT Delhi, India.
- Presented a paper at CISP-BMEI-'11 International conference during 15-17 October 2011 at Shanghai, China.
- Presented a paper at Centenary Conference Electrical Engineering, Indian Institute of Science, during 14-17 December 2011 at Bangalore, India.
- Presented papers at IEEE Tencon 2016 at Singapore.

Workshop Conducted

- Recent Trends in Signal Processing and Communication Technologies (RTSCT-2013)
- Online workshop on Machine learning and Applications, 22-02-2021 to 26-02-2021.

Patents

Funded Projects

Journals

Publications under review/revision

1. Palla, Parasuram Yadav, Amba Shetty, B. S. Raghavendra, and A. V. Narasimhadhan. "Can Spectral Matching Algorithms be explored in Endmember Extraction." (Under communication).
2. Palla, Parasuram Yadav, Amba Shetty, B. S. Raghavendra, and A. V. Narasimhadhan. "Corner Driven Iterative Clustering for Endmember Extraction." (Under communication).
3. Ravikumara K N, Akhilesh Yadav, Hemantha Kumar, Gangadharan K V, and **A V Narasimhadhan**, Convolutional Neural Network-based Fault diagnosis of Gearbox of an IC Engine using Vibration Analysis, **under revision**
4. Sudhakar, Raghavendra BS and **A V Narasimhadhan**, Sparse-Prony for spike detection in two-photon calcium imaging (ICVGIP)
5. Deshmuk, Bharghava B C, Satya Kumar Seungil Yoon, and **A V Narasimhadhan**, Realtime Strategy for image data labelling using binary models and active sampling, **Submitted to NCC**
6. G V S S K R Naganjaneyulu, G Prashanth, M Revanth and **A V Narasimhadhan** "An Empirical comparative study of trading strategies using indicators in crypto market paradigm" **ICETE 2023**
7. Prateek Agrawal and A.V. Narasimhadhan, RegDet : End-to-End Object Detection using parameterized CNN and Transformers, undereview, 2023.
8. Lance Abhishek Raj and A.V. Narasimhadhan, Text Data Annotation with Active Learning, undereview, 2023
9. G V S S K R Naganjaneyulu, G Prashanth, M Revanth and **A V Narasimhadhan** "Multi Indicator based Hierarchical Strategies for Technical Analysis of Crypto market Paradigm" **IEEE Access 2023**
10. Surya Chand G, Sandeep Kumar and **A V Narasimhadhan**, A Miniature Implant Antenna For Wireless Neural Monitoring Applications, under view.
11. Parasuram Yadav Palla, Amba Shetty, B.S. Raghavendra, **A.V. Narasimhadhan**, A Comprehensive Study on Endmember Initialization in Hyperspectral Image Analysis, **Journal of the Indian Society of Remote Sensing**, 2023.

12. Sudhakar, Raghavendra BS and **A V Narasimhadhan**, Approximate FRI-based seismic reflectivity estimation (Signal Image and Video Processing)
13. Mahesh Kumar T N, Deepak K, **A V Narasimhadhan**, "Group Attack Dingo Optimizer for Enhancing Speech Recognition in Noisy Environments in **The European Physical Journal Plus**

Publications accepted/published

1. Surya Chand G, Sandeep Kumar and **A V Narasimhadhan**, A Compact Dual-band Hat Shaped Antenna with Band Specific Behavior Using Harmonic Mixer for Passive Neural Monitoring, Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Accepted, 2023.
2. G V S S K R Naganjaneyulu, G Prashanth, M Revanth and **A V Narasimhadhan** "Multi Indicator Based Hierarchical Strategies for Technical Analysis of Crypto Market Paradigm" **IJECES 2023**
3. Radha R C, Jeny Rajan, Raghavendra B S, **A V Narasimhadhan**, Machine learning techniques for dental disease diagnosis: A Review, accepted, **International Journal of Medical Informatics, 2023**
4. Sudhakar, Raghavendra BS and **A V Narasimhadhan**, Sparse-Prony FRI Signal Reconstruction, **Signal Image and Video Processing**, 2023.
5. Deepa C, Amba Shetty, **Narasimhadhan A.V.**, Performance evaluation of Dimensionality Reduction techniques on hyperspectral data for mineral exploration, **Earth Science Informatics**, 2023.
6. Deepa C, Amba Shetty, **Narasimhadhan A.V** Knowledge Distillation: A novel approach for Deep Feature Selection, **The Egyptian Journal of Remote Sensing and Space Sciences**, 2023
7. Sudhakar, Raghavendra BS and **A V Narasimhadhan**, Reconstruction of the discrete finite rate of innovation signals via universal scheme Journal : **Circuits, system and signal processing**, 2022
8. Ravikumara K N, Akhilesh Yadav, Hemantha Kumar, Gangadharan K V, and A V Narasimhadhan, Convolutional Gearbox Fault Diagnosis based on Multi-Scale Deep Residual Learning and Stacked LSTM Model , **Measurement, An International Journal, 2021**
9. Karuna Kumari Eerapu, Shyam Lal, and **A V Narasimhadhan**, "O-SegNet: Robust Encoder and Decoder Architecture for Objects Segmentation from Aerial Imagery Data", **IEEE Transactions on Emerging Topics in Computational Intelligence**, 2020.
10. Parasuram Yadav Palla, Amba Shetty, B.S. Raghavendra, **A.V. Narasimhadhan**, Subtractive clustering and phase correlation similarity measure for endmember extraction, **Infrared Physics Technology** (2020) 103452.
11. Karuna Kumari Eerapu, Balraj Aswath, Shyam Lal, Fabio Dell'Acqua and **A. V. Narasimhadhan**, Dense Refinement Residual Network for Road Extraction from Aerial Imagery Data, **IEEE Access**, 2019.
12. Asha C S and **A. V. Narasimhadhan**, A Comparative Study of Illumination Invariant Techniques in Video Tracking Perspective, **IETE Technical Review**, 2019.
13. Karuna Kumari E, Devikalyan Das, Shilpa Suresh, Shyam Lal and **A. V. Narasimhadhan**, A Robust Framework for Quality Enhancement of Aerial Remote Sensing Images, **Infrared Physics and Technology**, (Elsevier), 2018.
14. Nagaraj Y, Sai Teja and **A V Narasimhadhan** "Automatic segmentation of intima media complex in carotid ultrasound images using Support Vector Machine" **AJSE, Springer**, 2018.
15. Asha C S and **A. V. Narasimhadhan**, Visual Tracking with Conditional Switching to Disjoint Tracker, IETE journal of Research, Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016).

16. Asha C S and **A V Narasimhadhan**, Enhanced Median Flow Tracker Based on Photometric Correction for Videos with Abrupt Changing Illumination , **The International Arab Journal of Information Technology**, Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016).
17. Nagaraj Y, Asha C S, Hema Sai Teja A, **A V Narasimhadhan** Carotid wall segmentation in longitudinal ultrasound images using structured random forest, **Journal of Computers and Electrical Engineering (Elsevier)**, 2018, Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016), doi.org/10.1016/j.compeleceng.2018.02.010.
18. Nagaraj Y , Pardhu Madipalli, Jeny Rajan, P Krishna Kumar, **A V Narasimhadhan**, “Segmentation of Intima Media Complex From Carotid Ultrasound Images Using Wind Driven Optimization Technique, **Biomedical Signal Processing and Control, (Elsevier)**, 2018, Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016), , Vol. 40, pp. 462-472, 2018.
19. Asha C S and **A V Narasimhadhan**, “Robust Infrared Target Tracking using Discriminative and Generative Approaches, **Infrared Physics and Technology (Elsevier)**, 2017, Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016), Vol. 85, pp. 114-125, 2017.
20. Aman Sharma, Naga Ganesh Kurapati, Ravi Prasad K. Jagannatha, Patrice Wirab, **Shyam Lal, A.V. Narasimhadhan**, ”Modified Null Space Strategy to Solve Consensus Problem”, Kuwait Journal of Science, vol. 43, No. 4, pp. 82-94, October 2016, Academic Publication council of Kuwait University, Kuwait. Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016) Impact Factor: 0.811, and [ISSN No.: 2307-4108 (Print), 2307-4116 (Online)].
21. Shyam Lal , **A V Narasimhadhan** and Rahul Kumar, ”Automatic Method for Contrast Enhancement of Natural Color Images”, Journal of Electrical Engineering and Technology, vol. 10, No.3, pp.1233-1243, April 2015. Indexed by SCI, Thomson ISI, Scopus (Elsevier), JCR (2016)) Impact Factor: 0.679, and [ISSN No. : 1975-0102 (Print)]
22. **A V Narasimhadhan**, A Sharma and D Mistry, “Image Reconstruction from Fan-Beam Projections without Back-Projection Weight in a 2-D Dynamic CT: Compensation of Time-Dependent Rotational, Uniform Scaling and Translational Deformations,” Open Journal of Medical Imaging, Vol. 3 No. 4, pp. 136-143, 2013.
23. **A V Narasimhadhan** and K Rajgopal, “FDK algorithms with no backprojection weight for circular and helical cone-beam CT,” *International Journal of Biomedical Imaging*, Volume 2012, Article ID 969432, 12 pages, 2012.
24. **A V Narasimhadhan** and K Rajgopal , “Analysis and computer simulations of fan-beam algorithms with no backprojection weight for equi-space linear array detector,” *J. of Non destructive testing and evaluation*, ISNT, 10(1), pp. 50-59, 2011.

Conferences

1. Ajay Kumar Sigatapu, Venkatesh Satagopan, GANESH SISTU, Ravikant SINGH, Narasimhadhan A. V, BEV-MoSeg: Segmenting Moving Objects in Bird’s Eye View **2023 (Accepted)**, **ICAR**
2. Palla Parasuram Yadav, Amba Shetty, BS Raghavendra, and **AV Narasimhadhan**, “ 1-D CNN for Mineral Classification using Hyperspectral Data,” **IGARSS**, 2023 (Accepted).
3. Palla Parasuram Yadav, Amba Shetty, BS Raghavendra, and **AV Narasimhadhan**, “MEANINGFUL REFORMULATION OF RELATIVE SPECTRAL DISCRIMINATION POWER TO ANALYZE HYPERSPECTRAL DATA,” **IGARSS**, 2023 (Accepted).
4. Palla Parasuram Yadav, Amba Shetty, BS Raghavendra, and **AV Narasimhadhan**, “Virtual sample generation of hyperspectral mineral data,” in MIGARS 2023-2023 IEEE Machine Intelligence for GeoAnalytics and Remote Sensing (MIGARS). IEEE, 2023 (Accepted).
5. Mahesh Kumar T N, Pradyoth Hegade, Deepak K T, **A V Narasimhadhan**, ”Speech Enhancement using CNN, **IEEE IConSIP**, 2022
6. Palla Parasuram, Nikhi Bobate, Amba Shetty, B.S. Raghavendra, **A.V. Narasimhadhan**, ATGP based Change Detection in Hyperspectral Images, **IECON**, 2022

7. Rahasya B, Depanshi, Devishri, Mahesh Kumar and **A V Narasimhadhan**, EnsembleWave: An Ensembled Approach for Speech Emotion Recognition , **IEEE Connect**, 2022.
8. Nikhi Bobate, Palla Parasuram and **A V Narasimhadhan**, Fusing Conventionally Features with Deep Learning Features for Hyperspectral Image Change Detection, **IEEE Connect**, 2022.
9. Bharghava B C, Deshmuk, Satya Kumar, Seungil Yoon and **A V Narasimhadhan**, Modulation and Signal Class labelling using active learning and classification using machine learning, **IEEE Connect**,2022
10. Palla Parasuram Yadav, Amba Shetty, B.S. Raghavendra, **A.V. Narasimhadhan**, 'Influence of The Gradient Correlation in Matching Spectral Signatures, **Accepted, IGARSS-2022**.
11. Mahesh Kumar T N, Adithya Jayan, Shreenidhi Bhat, Anvith M, **A V Narasimhadhan**, "Monophone and Triphone Acoustic Phonetic Model for Kannada Speech Recognition System **WiSPNET-2022**
12. Shashank Holla S, Mahesh Kumar T N, Jeevan Revaneppa Hiretanad, Deepak K T and **Narasimhadhan A V** "End-to-End Speech Recognition for Low Resource Language Sanskrit using Self-Supervised Learning"International conference on Wireless Communications Signal Processing and Networking(**WiSPNET-2022**)
13. P Sudhakar Reddy, BS Raghavendra, **AV Narasimhadhan**, Magnetic resonance image reconstruction by nullspace based finite rate of innovation framework, **ICVGIP**, 2021.
14. Surya Prakash P, Venkata Rohit M and **A V Narasimhadhan**, VesselXnet - A lightweight and efficient encoder-decoder based model for Retinal Vessel Segmentation , **Indicon 2021**
15. Bharghava B C, Deshmuk, Rupa V, Rajendra Prasad, Satya Kumar and **A V Narasimhadhan**, Deep Learning Approach for Wireless Signal and Modulation Classification, **VTC fall 2021**
16. Palla Parasuram Yadav, Amba Shetty, Raghavendra BS and **A V Narasimhadhan**, Influence of the brightest and the darkest pixels on initialization and extraction of endmembers, **IEEE, IGARSS, 2021**.
17. Palla Parasuram Yadav, Amba Shetty, BS Raghavendra, **A.V. Narasimhadhan**, Phase Correlation Similarity Measure for Target Detection in Hyperspectral Data, **Indicon**, 2020.
18. Palla Parasuram Yadav, Amba Shetty, BS Raghavendra, **A.V. Narasimhadhan**, SIMILARITY MEASURES IN GENERATING SPECTRALLY DISTINCT SIGNATURES, **In-GARSS**, 2020
19. D Suryachand Gopavajhula, Sandeep Kumar, **A.V. Narasimhadhan**, Dual-Band Antipodal Vivaldi Antenna For Wireless Neural Monitoring Applications, **ICRAIE**, 2020.
20. P Sudhakar Reddy, A Premkumar, B Saikiran, BS Raghavendra, **A V Narasimhadhan**, Finite Rate of Innovation Signal Reconstruction using Residual Neural Networks, **CICT**, 2020.
21. Deepa C, Amba Shetty, **A V Narasimhadhan**, Quality Assessment of Dimensionatly Reduction Techniques on Hyperspectral Data: A Neural Network based Approach, **ISPRS**, 2020.
22. C Akshay Kumar, Mahesh Kumar T N and **A V Narasimhadhan**, Cell Segmentation by Modified U-Net Architecture for Biomedical Images, **IEEE Connect**,2020.
23. M. Ajay Babu, K. Krishnamoorthy and **A.V. Narasimhadhan**, A High Gain Zero Index Metamaterial for Radome Applications, **IEEE Connect**, 2020.
24. Rama Sai Mamidala, Uday Uthkota, Mahamkali Bhavani Shankar, A Joseph Antony and **A V Narasimhadhan**, :Dynamic Approach for Lane Detection using Google Street View and CNN, **IEEE Tecnon 2019**, India.
25. A V Narasimhadhan, Aman Sharma, Jenny Rajan, G V S S K R Naganjaneyulu, Sure Avinash P K Vinay and N Bal Kishan and **A V Narasimhadhan** "Reconstruction of Edges from Fan-Beam Projections" **IEEE Tencon 2018**, South Korea.
26. Asha C S and **A V Narasimhadhan**, Vehicle Counting for Traffic Management System using YOLO and Correlation Filter, **IEEE Connect 2018**

27. Pardhu Madipalli, Sandeep Kotta, Harish Dadi, Nagaraj Y, Asha C S and **A V Narasimhadhan** “Fully Automatic Segmentation of Intima Media Complex in Common Carotid Artery Using Adaptive Wind Driven Optimization” , **NCC 2018**
28. Nagaraj Y and **A V Narasimhadhan**, Comparison of edge detection algorithms in the framework of despeckling carotid ultrasound images based on Bayesian estimation approach, **NCVPRIPG 2017**, IIT Mandi.
29. G V S S K R Naganjaneyulu, Ch Sai Krishna and **A V Narasimhadhan** A Novel Method for Logo Detection Based on Curvelet Transform Using GLCM Features, **CVIP 2017**
30. Asha C S and **A V Narasimhadhan**, Evaluation of Feature Channels for Object Tracking in RGB and Thermal Imagery Using Correlation Filter, **NCC 2017**
31. G V S S K R Naganjaneyulu, Basheeruddin Shah Shaik and **A V Narasimhadhan** ”R Peak Delineation in ECG Signal Based on Polynomial Chirplet Transform using Adaptive Threshold” , **ICIIS 2016**.
32. Sourabh Malpani, Asha C S and **A V Narasimhadhan** “Thermal Vision Human Classification and Localization using Bag of Visual Word” **IEEE Tencon 2016**
33. Nagaraj Y, Asha C S and **A V Narasimhadhan** “Assessment of Speckle Denoising in Ultrasound Carotid Images using Least Square Bayesian Estimation Approach” **IEEE Tencon 2016**
34. G V S S K R Naganjaneyulu, and **A V Narasimhadhan** “A Multi Clue Heuristic Based Algorithm for Table Deteion” **IEEE Tencon 2016**
35. G V S S K R Naganjaneyulu, and **A V Narasimhadhan** “A Novel Method for Pitch Detection via Instantaneous Frequency Estimation using Polynomial Chirplet Transform” **IEEE Tencon 2016**
36. Sourabh Malpani, Anu Shaju Areeckal and **A V Narasimhadhan** “Multi-Class Object Categorization based on Binary Descriptor” Accepted in **ICECS-2016**
37. Asha C S , and **A V Narasimhadhan** “Adaptive learning rate for visual tracking using corrlation filters” in the proceedings of **ICISP-2016**
38. Basheeruddin Shah Shaik, G V S S K R Naganjaneyulu Gudapati T. Chandrasheker and **A V Narasimhadhan**, ”Method for QRS Delineation Based on STFT using Adaptive Threshold”, **ICISP-2015**.
39. Basheeruddin Shah Shaik, G V S S K R Naganjaneyulu Gudapati and **A V Narasimhadhan**, ”A Novel Approach for QRS Delineation in ECG Signal Based on Chirplet Transform”, **IEEE Connect 2015**.
40. G V S S K R Naganjaneyulu , **A V Narasimhadhan** and K Venkatesh ”Performance evaluation of OCR on poor resolution text document images with different preprocessing steps”, **IEEE Tencon 2014**.
41. V Anudeep kumar reddy, P Saidi Reddy, G R C Reddy, R L N Sai Prasad, **A V Narasimhadhan**, K Sandeepkumar and Sanjeev Afzulpurkar, “Simultaneous measurement of temperature and pressure sensor for oceanography using Bragg gratings,” in **Proceedings of Ocean Sensing and Monitoring**, 2013, USA.
42. **A V Narasimhadhan**, K Sumith and K Rajgopal, “3D Reconstruction using FDK Algorithm with no backprojection weight from completed projections in lateral truncation situation: A performance evaluation study,” in **Proceedings of EE Centenary Conference, IISc**, 2011, Bangalore, India.
43. **A V Narasimhadhan** and K Rajgopal, “A new hybrid-FBP inversion algorithm with inverse distance backprojection weight for CT reconstruction,” in **Proceedings of 11th Fully 3D Meeting and 3rd HPIR Workshop**, pp. 84-87, 2011, Postdam, Germany.
44. K Sumith, **A V Narasimhadhan** and K Rajgopal, “Evaluation of 2D Image Reconstruction using Fan-Beam FBP algorithm with no Backprojection Weight from WLP Completed Truncated Projection Data,” **CISP-BMEI 2011**

45. K Sumith, **A V Narasimhadhan** and K Rajgopal, "Performance Evaluation of Reconstruction with Fan-Beam Algorithm with no Backprojection Weight in Truncated Projection Completion using Linear Prediction, **IEEE Tencon 2011**.
46. **A V Narasimhadhan** and K Rajgopal, "An Efficient Reconstruction Algorithm for Reducing the Axial Intensity Drop in Circular Cone-beam CT," **2-Day International Symposium on Medical Imaging: Perspectives on Perception and Diagnostics**, IIT Delhi, 2010.
47. **A V Narasimhadhan** and K Rajgopal, "Helical FDK Algorithms With No Backprojection Weight," **IEEE Tencon 2009**
48. **A V Narasimhadhan**, K P Anoop and K Rajgopal, "FDK algorithms with no backprojection weight, " in **Proceedings of 10th Fully 3D Meeting and 2nd HPIR Workshop**, pp. 158-161, 2009, Beijing, China.

Table 1: Teaching Experience

Tit of the Course	Year	UG/PG	No.of Students	Institute
Signlas and Systems	2012	UG	80	NITGoa
Electromagnetic Thoery	2012	UG	80	NITGoa
Digital Signal Processing	2012	UG	35	NITGoa
Signals and System lab	2012	UG	37	NITGoa
Digital Signal Processing	2013	UG	37	NITGoa
Analog Communication	2013	UG	38	NITGoa
Microwave Engineering	2013	UG	37	NITGoa
Seminar Course	2013	UG	37	NITGoa
Digital Signal Processing Lab	2013	UG	37	NITGoa
Microwave Engineering Lab	2013	UG	37	NITGoa
Image processing	2013(Summer)	UG	4	NITK
Image processing	2013	UG	55	NITK
Electromagnetic Thoery	2013	UG	55	NITK
Radiating Systems	2014	UG	35	NITK
Microwave Engineering	2014	UG	110	NITK
Mathematics for ECE Engineering	2014	UG	110	NITK
Image processing	2015	UG	60	NITK
Applications of Digital Signal Processing	2015	UG	60	NITK
Digital Signal Processing Lab	2015	UG	110	NITK
Math Foundations for comm. Engg.	2015	PG	40	NITK
Advanced Digital Signal Processing(wavelets)	2015	UG	60	NITK
Digital Signal Processing	2016	UG	110	NITK
Digital Signal Processing Lab	2016	UG	110	NITK
Information Theory	2016	UG	50	NITK
Time Frequency Analysis	2017	UG and PG	109	NITK
Numerical Analysis and Applications	2017	UG	45	NITK
Stochastic Process and Applications	2017	UG	77	NITK
Pattern Recognition and Machine learning	2018	UG	80	NITK
Linear algebra and Probability	2018	PG	70	NITK
Pattern Recognition and Machine learning	2019	PG	95	NITK
Information theory and Coding	2019	UG	80	NITK
Computer Vision and Image processing	2019	PG	50	NITK
Linear algebra	2019	PG	90	NITK
Linear algebra	2019	UG	110	NITK
Opitimization	2020	PG	30	NITK
Computational Imaging and Physics	2020	PG	45	NITK
Probabilistic Models in Machine Learning	2020	PG	30	NITK
Speech and Audio Processing	2021	UG	120	NITK
Image and video processing	2021	UG	50	NITK

Table 2: Teaching Experience

Tit of the Course	Year	UG/PG	No.of Students	Institute
Signal Analysis And Processing	2021	PG	80	NITK
Advanced Digital Signal Processing (FRI)	2022	UG	25	NITK
Deep Learning and Applications	2022	PG	60	NITK
Image processing and Computer Vision	2022	PG	40	NITK
Optimization	2023	PG	50	NITK

Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

- Dr. C S Asha, P.hD student of mine, has been awarded for Special Mention of the Jury Award in category of Electronics and communication by Board for IT Education Standards (BITES)
- Honorarium for reviewing the book titled "Principles of Electromagnetic", 2 Edition, McGraw Hill Education.
- Certificate of Appreciation for the outstanding support during Image processing workshop organized by i3indya Technologies.
- Best paper award for the *J. of Non destructive testing and evaluation*, ISNT, 10(1), 50-59, 2011
- Granted registration fee from the conference organisers for attending the Fully 3D conference in Beijing, China, 2009.
- Secured 99.01 percentile in Graduate Aptitude Test in Engineering (GATE)-2005.

Professional Activities

- Reviewer of IEEE Transactions on Biomedical Signal Processing
- Reviewer of IEEE Transactions on Industrial Electronics
- Reviewer of IEEE Transactions on Geoscience and Remote Sensing
- Reviewer of IEEE Geoscience and Remote Sensing Letters
- Reviewer of IEEE Access
- Reviewer of Biomedical Physics Engineering Express
- Reviewer of IET Electronics letters
- Reviewer of IET Computer Vision
- Reviewr of IET Image processing
- Reviewer of **Journal of Medical Imaging and Health Informatics**
- Reviewer of **International Journal of Research in Engineering and Technology**
- Reviewer of a book publisher (McGraw Hill Education).
- Co-ordinator of Image Processing Workshop was held at NIT Goa.
- Co-ordinator of Recent Trends in Signal Processing and Communications Technologies.

Membership in Professional Bodies

- IEEE.
- IETE.
- ISTE.
- ISCA.
- Member of DUGC in ECE at NITK.
- Member of DRPC in ECE at NITK.
- DUGC Secretary