Dr. Srinivas Bachu

Present Position and Address:

Associate Professor & HOD
Department of ECE
Marri Laxman Reddy Institute of Technology and Management **(Autonomous)**
Dundigal, Hyderabad**,** R.R Dist, Telangana, India
Phone: +91- 99127 12798
E-Mail: bachusrinivas@gmail.com

Marital Status: Married

Date of Birth : May 8th, 1984

Academic Background:

Degree/Examination	Board/Institution/University	Year of Passed	%
Ph.D (Image & Video Processing)	GITAM School of Technology, GITAM Deemed To Be University Visakapatnam, Andhra Pradesh.	October, 2018	Pass
M.Tech (Embedded Systems)	Vidya Vikas Institute of Technology, Chevella. Affiliated to JNTU Hyderabad, Telangana.	2010	72.75%
B. Tech (ECE)	Bapuji Engineering College, Nirmal,Adilabad. Affiliated to JNTU Hyderabad, Telangana.	2006	69.32%
Intermediate (10+2)th	BIE, Triveni Junior College, Suryapet, Telangana.	2001	82.20%
X th Standard	BSE, Vivekananda Vidya Mandir High School Tirumalagiri, Telangana.	1999	60.00%

Academic Experience: 13.4 years

Name of the Organization	Position Held	Period	
		From	To
MLR Institute of Tech. and Management (*Autonomous)* Dundigal, Hyderabad. Telangana.	Professor & HOD	19-11-2018	Till Date
KL Deemed To Be University Hyderabad Aziz Nagar, Hyderabad, R.R Dist, Telangana.	Associate Professor	21-05-2018	17-11-2018
Guru Nanak Institutions Technical Campus (*Autonomous*), Hyderabad, Telangana.	Associate Professor	01-02-2016	19-05-2018
	Assistant Professor	02-06-2014	31-01-2016
Sagar Group of Institutions Chevella, Hyderabad, Telangana.	Assistant Professor	01-07-2010	30-04-2014
Mannan Institute of Science & Tech., (MIST), Chevella, Hyd, Telangana.	Assistant Professor	28-07-2007	10-05-2008
Institute for Electronic Governance, IIIT Campus, Gachibouli, Hyderabad.	IT Associate	20-08-2006	15-06-2007

Publications:

SCI/SCIE/ESCI/ SCOPUS Indexed Journals	International Conference Papers (SCOPUS Indexed)	Text Books/Monographs/ Book Chapters		Awards	
		National	International	National	International
7	17	1	*7	3 (1-Best Teacher Award)	1
24		*8 (*2- Scopus Indexed Book Chapters)		4	

Total No. of SCOPUS/SCIE/ESCI Indexed Publications (Conf./Journal Papers/Book): 24

FDP/STTP/ Seminars/ Workshops Attended	National Level Tech. Symposium Papers	Citations & h-index			
		Google Scholar	SCOPUS	WoS	VIDWAN Score (10)
20	10	*Citations*: 103 *h-index: 5*	*Citations: 20 h-index: 2*	*Citations: 7 h-index: 2*	8.6

Google Scholar / SCOPUS / WoS / VIDWAN Profile Links:

Google Scholar: https://scholar.google.com/citations?user=iKMVhWwAAAAJ&hl=en

SCOPUS   : https://www.scopus.com/authid/detail.uri?authorId=56638033600

WoS   : https://publons.com/researcher/2187772/srinivas-bachu

VIDWAN   : https://vidwan.inflibnet.ac.in/profile/220435

Research Guidance (Co-supervisor):

Name of the Research Scholar: N. Ramya Teja
Major Subject Area   : Video Processing
Address of University   : KL Deemed To Be University, Vijayawada,A.P.
Type of Admission   : Part time
Year of Admission   : 2018

Policy Making:

1. **BoS Chair Person**, Department of ECE, MLRITM (Autonomous), 2019-20 to Till Date.

Ratification/SCM Details:

1. Ratified as **Assistant Professor** from JNTUH. SCM held on 18.02.2017 at GNITC.
2. Ratified as **Assistant Professor** from JNTUH. SCM held on 24.01.2019 at MLRITM.
   JNTUH Registration ID: 88150404-141603

Achievements:

1. Received the **"Certificate of Appreciation"** from the GNITC (Autonomous), Management for publishing text book on **"Design Manual on Signals & Signal Processing Simulation using MATLAB"** at Canadian Academic Publishing, Canada. June 10th, 2016.

2. Received the **"Appreciation Letter"** from the Management and Principal, for the successful conducting of the workshop on **"Signals & Signal Processing Simulation using MATLAB"** during 28th – 29th July, 2011 at SITECH, Chevella, Telangana.

3. Received as "**Winner**" in **"Technical Quiz"** during the academic year 2004-2005, at Bapuji Engineering College, BESMA-2005, Nirmal, Adilabad, Telangana.

4. Received the **"Certificate of Merit"** in "National Level Students Technical Paper Contest" at TKR Engineering College, Zignasa-2010, Hyderabad, Telangana.

Awards & Recognizations:

Sl. No	Name of the Award	National/ International	Name of the Professional Body/Organization	Venue	Month & Year
1	Young Faculty in Engineering	International	Venus International FacultyAwards-VIFA 2019	Radha Regent, Chennai	July 6th, 2019
2	Best Young Researcher Award-2017	National	IASTE Awards - 2017	Royal Plazza Hotel, Koyembedu, Chennai	Sept. 10th, 2017
3	National Educational Excellence Award-2017 "*Adarsh Vidya Saraswati Rashtriya Puraskar*"	National	Global Management Council -Glacier Journal of Research Foundation	Ahmedabad, Gujarat-380061	Nov., 2017
4	Best Teacher Award	College Level	Sagar Group of Institutions	Sagar Institute of Technology Chevella, Hyderabad	July, 2013

Workshops Organized:

1. Two Day National Workshop on "Image Processing Theory, Algorithms & Applications (IPAA'16)," December 16th & 17th, 2016 at Guru Nanak Institutions Technical campus (Autonomous), Hyderabad, R.R Dist, Telangana.
    Responsibility: *Co-Convener*

2. A Two Day National Level Workshop on "Signals & Signal Processing Simulation using MATLAB during July 28th–29th, 2011" at Sagar Institute of Technology (SITECH), Chevella, RR Dist, Telangana.
    Responsibility: *Coordinator cum Resource Person*

3. International Workshop on "Image Processing Theory, Tools & Applications (IPTTA'14)," January 23rd – 25th, 2014 at Sagar Group of Institutions, Chevella, RR Dist, Telangana.
    Responsibility: *Co-Convener*

Membership in Professional Bodies:

- **MISTE** (Life Member of Indian Society for Technical Education, New Delhi).
  M. No: LM68554

- **MIE** (Member of Institute of Engineers, India, Kolkata).
  M. No: AM1474424

- **M.IAENG** (Member of International Association of Engineers, Hong Kong).
  M. No: 126588

- **UACCE.** M. No: AM10100056883

Editorial/Reviewer Board Member:

- Reviewer Board Member of International Conference on **ICIECE 2016 and ICIECE 2017, ICIECE-2018, ICIECE-2019 at GNITC (Autonomous).**
- IGI Global Journal: Computer Vision and Image Processing
- Reviewer Board Member of "**43th Annual Conference of IEEE** Industrial Electronics Society (IECON 2017)", National Convention Center, Bejing, China.
- International Journal of Engineering Trends & Technology (**IJETT**).
  Membership Id: SSRGJ-IJETT-1409.

Academic/Administration Responsibilities:

1. Department level **Autonomous Coordinator** at MLRITM, Hyderabad, 2019-2020.
2. Department level **NBA Coordinator** at MLRITM, Hyderabad, 2018-2019.
3. Department level **Project Coordinator (UG and PG level)** at MLRITM, Hyderabad from June 2019.
4. International Conference Proceedings Coordinator of ICIECE-2015, ICIECE-2016 at GNITC (Autonomous), Hyderabad.
5. **Faculty Research Publication** In-charge for UGC Autonomous, NBA, NIRF and NAAC Work at GNITC Hyderabad, during 2014-2017.
6. **NAAC Criteria – 3 Coordinator** at GNITC, Department of ECE, during 2017-2018.
7. **NIRF and FFC Work Coordinator** at GNITC, Department of ECE, during 2015-2017.
8. **Project Co-Ordinator (Mini & Major)** at U.G level for 7 Sections, Department of ECE, GNITC, during 2017-2018.
9. **Criteria 2 & 9 Member** for the **NBA** Accreditation work at GNITC Hyderabad.
10. Worked as **Managing Staff Member** of Examination Branch at Sagar Group of Institutions.
    Duration: November 2010 – February 2012.
11. **Time Table Coordinator** from 2006 to 2007 and 2010 to 2014 at Sagar Group of Institutions.
12. **Attendance In-charge** from June 2010 to April 2014.
13. **Class Mentor from** 2010 to till date at Sagar Group of Institutions and GNITC.
14. PTSP **Subject Coordinator** at GNITC from 2014 to till date
15. **Coordinator** for various Technical Activities (Engineers Day, Fresher's Party, Annual Day Celebrations, Technical Fest, and Paper Presentation) at Sagar Group of Institutions from 2010-2014 and GNITC from 2014 – till date.

Courses Taught:

1. Signals & Systems
2. Probability Theory & Stochastic Processes
3. Digital Signal Processing
4. Electromagnetic Theory & Transmission Lines
5. Control Systems

References:

1. **Dr. K. Manjunathachari,** Professor Department of ECE
   GITAM Deemed To Be University, Hyderabad
   Mobile No: 9246923578
   E-Mail ID: manjunath4005@gitam.edu
2. **Dr. K. Koteswara Rao,** Professor & Principal
   KL Hyderabad (Deemed To Be University), Hyderabad
   Mobile No: 99948796039
3. **Prof. R. K. Singh,** Associate Director – 2
   Guru Nanak Institutions Technical Campus (Autonomous), Hyderabad
   Mobile No: 8096185678

Declaration:

I hereby declare that the information mentioned above is true to the best of my knowledge.

Place: Hyderabad
Date: 16.02.2022

(Dr. SRINIVAS BACHU)

List of Publications

❖ **Journal Paper Publications:**

1. **Srinivas Bachu,** K. Manjunath Achari, "Adaptive order search and tangent-weighted trade-off for motion estimation in H.264", Journal of King Saud University - Computer and Information Sciences, Volume 30, Issue 2, 2018, Pp. 249-258, ISSN 1319-1578, doi. 10.1016/j.jksuci.2016.07.002. **[SCI, SCOPUS, IF: 13.473].**

2. **Srinivas, B**., Manjunathachari, K. Adaptive Order Cross–Square–Hexagonal search and fuzzy tangential-weighted trade-off for H.264 in motion estimation. *Sādhanā* **43,** 17 (2018). https://doi.org/10.1007/s12046-018-0797-y. **[SCI, SCOPUS, IF: 1.568].**

3. Teja, Nandireddygari Ramya, S. Arunmetha, and **Srinivas Bachu.** "An Efficient Field Programmable Gate Array Based Hardware Architecture for Efficient Motion Estimation with Parallel Implemented Genetic Algorithm." Concurrency and Computation: Practice and Experience (2021). First published: 14 July 2021, https://doi.org/10.1002/cpe.6459. **[SCI, SCOPUS, IF: 1.536].**

4. **Srinivas Bachu,** N. Ramya Teja, "Fuzzy Holoentropy-Based Adaptive Inter-Prediction Mode Selection for H.264 Video Coding", International Journal of Mobile Computing and Multimedia Communications (IJMCMC), Vol. 10, Issue 2, Article 3, pp. 42-60, 2019. DOI: 10.4018/IJMCMC.2019040103. **[SCI, SCOPUS].**

5. P Sathish Kumar, **Srinivas Bachu**, "IoT based home area network smart meter system design using ARM 7", International Journal of Advanced Trends in Computer Science and Engineering, 8(1.3), 2019, 34 – 37. **[SCOPUS].**

6. **Bachu Srnivas,** M. Shivaranjani, N. Udayakumar, N. Anuroop Reddy "Moving Object Detection for Real-Time Traffic Surveillance using Genetic Algorithm", International Journal of Engineering Trends and Technology (IJETT), V49(6),388-393 July 2017.ISSN:2231-5381. **[SCOPUS].**

7. M. Aravind Kumar, D. Naresh, **Srinivas Bachu**, "Bag-of-Surf and Spatial Pyramid Matching for Food Recognition and Calorie Extraction", International Journal of Recent Technology and Engineering, Vol. 8, Issue 1, Article 3, Retrieval Number: A2126058119,pp. 2204-2212, May 2019. **[SCOPUS].**

❖ **Conference Paper Publications:**

1. **S. Bachu** and K. M. Achari, "Motion estimation in video compression and comparision between LSK, Huffman & Runlength coding," 2015 International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO), 2015, pp. 1- 4. DOI: 10.1109/EESCO.2015.7253722. IEEE Xplore. **[SCOPUS].**

2. **S. Bachu** and K. M. Chari, "A review on motion estimation in video compression," 2015 International Conference on Signal Processing and Communication Engineering Systems, 2015, pp. 250-256, doi: 10.1109/SPACES.2015.7058259. IEEE Xplore. **[SCOPUS].**

3. **Bachu S**., Olive Priyanka Y., Bhagya Raju V., Vijaya Lakshmi K. (2016) A Novel Approach for Detection of Motion Vector-Based Video Steganography by AoSO Motion Vector Value. In: Saini H., Sayal R., Rawat S. (eds) Innovations in Computer Science and Engineering. Advances in Intelligent Systems and Computing, vol 413. Springer, Singapore. https://doi.org/10.1007/978-981-10-0419-3_27. **[SCOPUS].**

4. M Aravind Kumar, K. Rameshchandra, **Srinivas Bachu**, "FRCAPE: Frequency Re- configurable Co-planar Antenna Using Parasitic Elements", 2020 IEEE InternationalConference on Advent Trends in Multidisciplinary Research and Innovation (ICATMRI), Pankaj Laddhad Institute of Technology

and Management Studies; Buldhana, Maharastra, India, December 30, 2020, pp. 1-5. Date Added to IEEE Xplore: 12 April 2021. DOI: 10.1109/ICATMRI51801.2020.9398416. **[SCOPUS].**

5. V. Prasad, P. S. S. Kumar and **S. Bachu**, "Multilevel Pipelined Processing for Aerial Image Restoration," 2019 International Conf. on Emerging Trends in Science and Eng.(ICESE), 2019, pp.1-5, doi:10.1109/ICESE46178.2019.9194619. **[SCOPUS].**

6. Mamilla Sirisha, **Srinivas Bachu**, Naluguru Udaya Kumar, "A Novel Approach to Detect Leaf Disease and Feature Extraction using IoT", IEEE 7th International Conference on Advanced Computing and Communication Systems (ICACCS-2021), Sri Eshwar College of Engineering, Chennai. 19 – 20 March, 2021. IEEE Xplore. **[SCOPUS].**

7. Kota Nithin Tej, K. Nagabhushanam, **Srinivas Bachu**, "IBMPS: Incubator Baby Monitoring and Parameter Sensing", IEEE 7th International Conference on Advanced Computing and Communication Systems (ICACCS-2021), Sri Eshwar College of Engineering, Chennai. 19 – 20 March, 2021. IEEE Xplore. **[SCOPUS].**

8. Shravya V., Adum Babu I., **Bachu S**. (2021) Design and Implementation to Find Multi- Issues in Brain Images with Mixture Clustering Techniques. In: Dash S.S., Panigrahi B.K., Das S. (eds) Sixth International Conference on Intelligent Computing and Applications. Advances in Intelligent Systems and Computing, vol 1369. Springer, Singapore. https://doi.org/10.1007/978-981-16-1335-7_22. **[Spinger Book Chapter, SCOPUS].**

9. Sailaja C, **Srinivas Bachu,** "A Comparative study on LSB replacement Steganography", 8th International Conference On Innovation In Electronics And Communication Engineering (ICIECE-2019), *Lecture Notes in Networks and Systems (LNNS), Springer Nature Singapore Pte Ltd,* pp. 601-612, April 2020 (online). DOI: 10.1007/978-981-15-3172-9_57. **[Spinger Book Chapter, SCOPUS].**

10. Shabbir Ali, K. V. Suresh, **Srinivas Bachu,** "SCSGFRA: Sine and Cosine Signal Generation for Fixed Rotation Angle", 8th International Conference On Innovation In Electronics And Communication Engineering (ICIECE-2019), *Lecture Notes in Networks and Systems (LNNS), Springer Nature Singapore Pte Ltd,* pp. 623-63, April 2020 (online). DOI: 10.1007/978-981-15-3172-9_59. **[Spinger Book Chapter, SCOPUS].**

11. **Srinivas Bachu**, Mounika Moturi and Nagabhushanam K, "Joint Sparsity and Total Variation Based Unmixing of Mixed Noise", ICCSSS 2020, Dec. 11th – 12th, 2020. Sub. No. 23. IOP Conference Series: Materials Science and Engineering. **[WoS, SCOPUS].**

12. **Srinivas Bachu**, Sudheer Kumar Reddy K and Nagabhushanam K, "Design and Monitoring of Smart Roads Based On Weather Data by using IoT", ICCSSS 2020, Dec. 11th – 12th, 2020. Sub. No. 25. IOP Conference Series: Materials Science and Engineering. **[WoS, SCOPUS].**

13. **Srinivas Bachu**, Shalini Thelapolu and Udaya Kumar Naluguru, "DCAECSCS: Divide and Conquer Algorithm Based Electro Cardia Signal Compression Scheme", ICCSSS 2020, Dec. 11th – 12th, 2020. Sub. No. 30. IOP Conference Series: Materials Science and Engineering. **[WoS, SCOPUS].**

14. V. Shravya, I. A. Babu and **S. Bachu**, "SBTHCT: Segmentation of Brain Tissues using Hybrid Clustering Technique," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 27-28 Aug. 2021, pp. 353-356, doi: 10.1109/RTEICT52294.2021.9573684. IEEE Xplore. **[SCOPUS].**

15. M. Jhansi, **Srinivas Bachu**, N. Udaya Kumar, M. Aravind Kumar, "IODTDLCNN: Implementation of Object Detection and Tracking by using Deep Learning based Convolutional Neural Network", 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), 16 – 18, February 2022. IEEE Xplore. **[SCOPUS - Accepted].**

16. MNV. Akanksha, **Srinivas Bachu**, N. Udaya Kumar, M. Aravind Kumar, "Implementation of Potential Leukemia Detection using Recurrent Neural Networks with Blood Cell Counting", 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), 16 – 18, February 2022. IEEE Xplore. **[SCOPUS - Accepted].**

17. N. Shivakumar, N. Udaya Kumar, **Srinivas Bachu**, M. Aravind Kumar, "Remote Sensing and Natural Image Dehazing using DCP based IDERS Framework", 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), 16 – 18, February 2022. IEEE Xplore. **[SCOPUS - Accepted].**

18. K. Meghana, K. Bhushan, **Srinivas Bachu**, "Implementation of Computer Aided System for Automated Bone Fracture Detection using Digital Geometry", 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), 16 – 18, February 2022. IEEE Xplore. **[SCOPUS - Accepted].**

19. B. Sushma Reddy, I. Adumbabu, **Srinivas Bachu**, " Implementation of Medical Image Watermarking using RDWT and SVD for Secure Medical Data Transmission in Healthcare Systems", 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), 16 – 18, February 2022. IEEE Xplore. **[SCOPUS - Accepted].**

20. A. Hari, E. Sreenivasulu, **Srinivas Bachu,** "Implementation of Brain Tumor Detection with Deep Learning Classification Using Hybrid Feature Extraction", 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022), 16 – 18, February 2022. IEEE Xplore. **[SCOPUS - Accepted].**

21. A. Sweatha, N. Udaya Kumar, **Srinivas Bachu,** "Drivable Area and Road Anomaly Segmentation using SSLG with V-Disparity Maps", International Conference on Electronics and Renewable Systems (ICEARS 2022, Tuticorin, India, 16th-18th March 2022.   IEEE Xplore. **[SCOPUS - Accepted].**

❖ Books/Monographs:

1. **Srinivas Bachu**, B. Venkanna, "Probability Theory and Stochastic Processes (PTSP)," **Anuradha Publications,** Chennai, India. August, 2013. ISBN No: 978-81-8472-242-0.

2. **Srinivas Bachu**, K. Manjunathachari, "Signals and Signal Processing Simulation using MATLAB", Canadian Academic Publishing, Canada. July 2015. ISBN No: 978-1-926-48829-5.

3. **Srinivas Bachu**, D. Sri Harsha, "Hand Book on Probability, Random Variables & Random Processes," LAP Lambert Academic Publishing, Germany. July 2016. ISBN No: 978-3-659-90600-8.

4. **Srinivas Bachu**, M. Aravind Kumar, "MATLAB Programming for Beginners," LAP Lambert Academic Publishing, Germany. March 2018. ISBN NO: 978-613-8-38606-3.

5. **Srinivas Bachu**, M. Aravind Kumar, "Detection of Motion Vector-Based Video Steganography by Adding or Subtracting One Motion Vector Value," **IntechOpen**, London, November 2018. ISBN NO: ISBN 978-953-51-6805-8. (Book Chapter)
DOI: 10.5772/intechopen.78230

6. A. Archana, P. Bhanu, M. Havanitha, B. Vineetha, and **Srinivas Bachu**, "ANQDS: Autonomous Navigation of Quadcopter for Delivery System," LAMBERT Academic Publishing Academy, Germany. May 2020. ISBN No: 978-620-2-55522-7.

7. Nagabhushanam Kundeti, M. Aravind Kumar, and **Srinivas Bachu**, "Signal Processing Simulation using MATLAB," LAMBERT Academic Publishing Academy, Germany. July 2020. ISBN No: 620-2-67121-1.

8. **Dr. Srinivas Bachu**, "Motion Estimation Algorithms for H.264/AVC using Modified AOS Methods," LAMBERT Academic Publishing Academy, Germany. January 8th, 2019, ISBN No: 978-3-659-96499-2.

❖ International Patents:

S. No.	Name of the Inventors	Title	Patent File Number	Date of Published
1	Nandkumar Phursule, Rajesh ; Kumar Beniwal, Rajender ; Bist, Ankur Singh ; Singh, Ashay ; Agarwal, Rashi ; **Bachu Srinivas** ; Gadekar, Devendra ; Sainath, N ; Sipahi, Esra ; Chordiya, (Dr.) S. B.,	IPDN- Read Handwriting: Intelligent Process to Read Handwriting Using Deep Learning and Neural Networks	Australian Application Number - 2020103527	Granting date: January 13th 2021, Australian OPI(Granted Published): January 28th, 2021.