

ALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

Nizara Educational Campus, Muthapudupet, Avadi IAF, Chennai – 600 055. Ph: 044 – 26842627 / 26842086

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

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	DESIGNATION	PR	OFESSOR		6		
EDUCATIONAL QUALIFICATION		B.I	E., M.Tech., Ph.D.,		4	20	
EXPERIENCE			.8 YEARS				
DATE OF JOINING			-01-2025		4		
EMAIL ID			kbajidvali@aalimec.ac.i	<u>n</u>			
AREA OF SPECIALISATION			ge Processing				
EDUCATIONAL QUALIFICATION							
DEGREE	BRANCH /		INSTITUTION	UNIV	ERSITY		

DEGREE	BRANCH / SPECIALIZATION	INSTITUTION	UNIVERSITY	YEAR
B.E.	Electronics & Communication Engineering	Ghousia College of Engineering, Ramanagar	BANGALORE UNIVERSITY	2002
M.Tech	E.C.E/Digital Systems& Computer Electronics (DSCE)	Narasaraopeta Engineering College, Narasaraopeta	J.N.T.U.K, KAKINADA	2009
PhD	E.C.E./ Image Processing	University Engineering College	SUNRISE UNIVERSITY, ALWAR	2018

PROFESSIONAL MEMBERSHIPS

- Life Member in I.S.T.E. (M.I.S.T.E)
- Life member in Institute Of Engineers (M.I.E.)

FDP ATTENDED

Participated in 40-Hour Online Faculty Development Programme on "AI for Communication and Signal Processing Applications" Sponsored by MeitY Gol Organized by E& ICT Academy, NIT Warangal and V.R.Siddhartha Engineering College, Vijayawada during 5th -14th February 2022.

• Total Attended FDP's :33

WORKSHOPS ATTENDED

- Attended one -day National level work shop on "EMBEDDED SYSTEMS "at Bharath College of Engg & Tech for women, Kadapa on 28th October 2015.
- Attended one-day workshop cum Seminar on "RECENT TRENDS IN COMMUNICATION SYSTEM DESIGN" on 14th July 2015 conducted by Akademika Lab Solutions NAVI MUMBAI.
- Attended two-day All India Workshop on "TRAINING OF INTELLIGENT ROBOTS & EMBEDDED SYSTEMS "at Madina Engineering College, (MEC) Kadapa on 9th & 10th October 2009 conducted by MEC & I.E. Local centre, Kadapa.
- Attended a two-day National workshop "RECENT TRENDS IN SIGNAL PROCESSING AND IMAGE PROCESSING" at Narasaraopeta Engineering College (NEC), Narasaraopeta on 26th & 27th December 2008.
- Participated in two-day online workshop on "VLSI Circuits Analog & Digital Design Perspectives" Organized by JNTUA College of Engineering (Autonomous) in association with AMS Technologies & HCL Technologies on 16/05/2020 & 17/05/2020.
- Participated in three-day online workshop on "NAAC Assessment and Accreditation: A Step by Step Process" organized by GATES Institute of Technology, Gooty, A.P, from 28/05/2020 to 30/05/2020.

SEMINARS ATTENDED

• Attended a seminar on MATLAB on 6th Sept 2011 at KADAPA.

ATTENDED STTP's

- "Internet of Things and Artificial Intelligence in Smart Communication and Networking (Phase-2)" organized by Dept of ECE, QIS College of Engg, Ongole from 23/11/2020 to 28/11/2020
- "Advances in Remote Sensing and its Applications Phase-II, organized by Dept of ECE, Narasaraopeta Engg College, Narasaraopeta from 14/12/2020 to 19/12/2020.

- "Emerging Trends in Antenna Design (ETWCAD-20)" organized by Dept of ECE, Yeshwantharao Chavan College of Engineering (YCCE), Nagpur from 21/12/2020 to 26/12/2020
- "Research Aspects on Deep Learning in Image and Video Processing" organized by Dept of ECE, Vellamal Institute of Technology, Chennai from 04/01/2021 to 09/01/2021.
- "Research Proposal Writing & AI Tools in Education and Research" held during 06.05.2024 to 11.05.2024 (ISTE approved Self-Financing Faculty Development Program) organized by P.R. Pote Patil College of Engineering & Management, Amravati, Maharashtra.2024

PUBLICATION DETAILS

- S.Bajidvali, M. Sreenivasa kumar, V. Venkata Rao, K. Raju, A. V. NageswaraRao Seventeen-Level Inverter Model By Cascading Flying Capacitor And Floating Capacitor H-Bridges" NeuroQuantology Journal (Scopus Indexed), March 2024, Volume 22, Issue 2 Pp:166-178.
- Shaik.BajidVali,A.V.Nageswara Rao,Swathi Jallu,D.V.N.L Sastry" An Effective DCT and Huffman coding Supervising System for Compression of MMG Uterine Signal" Sodh kosh: Journal of Visual and Performing Arts ,June 2024, ISSN(online): 2582-7472,Issue 5(6) Pp:2657-2662
- S.BajidVali, Farooqi Mohammed Khasim, V.VenkataRao "Advanced Rounding based Approximate Multiplier (AROBA) and MAC Unit Design" Journal of Emerging Technologies and Innovative Research (JETIR), May 2023 Volume 10,Issue 5, ISSN:2349-5162 PP :e30-e35
- S.Bajidvali, A.V. Nageswara Rao, B.Suneetha, "Deep Learning Based Classification ofCovid-19 Lung Images" Journal of Population Therapeutics & Clinical Pharmacology (ESCI) JPTCP, ISSN 1198-581X, eISSN 1710-6222: Vol.No:30, No.2 (2023) PP: e415-e422
- Shaik. Bajid Vali1, G.Ganesh Siva Sai"Forest fire detection system with GPS co-ordinates" The International journal of analytical and experimental modal analysis ISSN NO: 0886-9367 Volume XIV,Issue X, October/2022 PP 511-515.
- S.Bajidvali, B.Raghavaiah, A.V. Nageswara Rao "16-Bit Spanning Tree Parallel Prefix Adder basedon Quaternary Logic" Journal of Interdisciplinary Cycle Research (JICR) ISSN: 0022-1945, Volume XIV, Issue III, and PP: 760-765.
- S.Bajidvali, B.Raghavaiah, Amit Gupta "Ultra wide Band Antenna Cognitive Radio with NOMA for5G Communication" Journal of Interdisciplinary Cycle Research (JICR) ISSN: 0022-1945VolumeXIII,Issue IV, PP: 2419-2424.
- Shaik.Bajid Vali,V. Venkata Rao, Gurrala Deena Sundara Rao "Design of Low-Power High-Performance 4 to 16 decoder using TGL and DVL Logic gates" A Journal Of Composition Theory (JAC) ISSN : 0731-675, Page No: 311-315 , DOI:22.18001, Issue :AJCT.2022.Volume :V15I08.22.2832

- Shaik.Bajid Vali,V. Venkata Rao, Gurrala Deena Sundara Rao "Design of Low-Power High-Performance 4 to 16 decoder using TGL and DVL Logic gates" A Journal Of Composition Theory (JAC) ISSN : 0731-675, Page No: 311-315 , DOI:22.18001, Issue :AJCT.2022.Volume :V15I08.22.2832
- S. Bajidvali, R Sambasiva Nayak, V.Venkata Rao, Amit Gupta "High Isolation Eight-Element MIMO Antenna Array tightly Arranged Based on Embedded Meta-Material Cells", Indian Journal of Science & Technology ISSN: 0974-6846, Vol: 13, Issue:1, April :2021, Pp:1168-1176
- . S.Bajidvali, A Sravani, M.Raviteja "Significance of Image Matting for Fundus Images" ISSN:0731-6755 A Journal Of Composition Theory Volume XV, Issue IX, SEPTEMBER 2022, PP:46-50
- S.Bajidvali, Amit Gupta, Narasimha Rao "Cuo-Doped Sno2 Sensor for H2S at 250 ^o C using ANN Technique", The International Journal of analytical and Experimental modal Analysis (IJAEMA) ISSN: 0886-9367 /volume XIII, Issue VIII, Pp: 2206-2211
- S.BajidVali, K.Riyazuddin "Design and Implementation of Novel 4-Bit ALU" Springer Scopus Index Journal, 19th May 2020, Online ISBN 978-981-15-1420-3 & Print ISBN 978-981-15-1419-7 (Part of the Lecture Notes in Electrical Engineering book series (LNEE, Volume 601)
- S.Bajidvali, A.V. Nageswara Rao, B.Raghavaiah, "Design of IoT based Surplus floated bodies Collecting Robot" International Journal of Management, Technology and Engineering, April 2019, ISSN: 7455, Volume IX, PP: 5856-5859.
- S.Bajidvali, K.Riyazuddin, & Fahim Shaik "Adaptive Optimizing Radiation Patterns of Smart Antennas" International Journal of Engineering Research (IJER) ISSN: 2319-6890(online) & 2347-5013(Print) April/May 2019 issue.
- S.Bajidvali, K.Riyazuddin, S.Nazeer Hussain, & S.Javed Basha " Evaluating the LTE Indoor and Outdoor Performance Using OFDM" IEEE Explore, accepted to be Publish in November 2018
- S.BajidVali, AnilKumarSharma,&Syed.MusthakAhmed "Significance Of Images And Algorithms of Image Processing For Detection And Determination Of Diabetes At Early Stage", IJECE, Aug-Sept 2017,ISSN(P):2278-9901; ISSN(E):2278-991X, Vol6, Issue 5
- S.BajidVali, AnilKumarSharma, & Syed.Musthak Ahmed "Implementation of Modified Chan Vase Algorithm to Detect And Analyze Diabetic Foot Ulcers" In IEEE Explore Journal, December 2017, Electronic ISBN ISBN: 978-1-50906266-9, Print on Demand (PoD) ISBN: 978-1-5090-6267-6, Pp: 36-40
- S.BajidVali & Anil Kumar Sharma, & Syed.Musthak Ahmed "An Early Detection to Manage Diabetic Anamolies Using IR Thermal Imaging" in ELSEVIER group JARDCS (Journal of Advanced Research in Dynamical and Control Systems) Scopus Index Journal, ISSN 1943-023X Vol. 9. Sp– 6 / 2017.
- S.BajidVali "Role of Fundus and Oct Images in Diabetic Retinopathy for Detection Of Exudates & Glaucoma by Image Processing Techniques" In international journal of advanced Trends in Engineering, Science and Technology. (IJATEST) ISSN 2456- 1126(ONLINE) Special Issue December 2016.
- S.BajidVali & C.Sireesha. "Enhancement of Image Fusion Using Multi-Resolution Singular Value Decomposition Technique" in International Journal of Latest Trends in Engineering & Technology (IJLTET) ISSN 2278-621X, Volume 06, Issue: 1 September 2015.

- S.BajidVali & B.N.Bhandari, "Adaptive Passive Duplicate Address Detection (APDAD) In MANETS", IJCNWMC Scopus Index Journal (International Journal of Computer Networking, Wirelessand Mobile Communications) Oct-2013-01, Volume 03, Issue: 4 **CONFERENCE DETAILS** Presented a paper on "Deep Learning-based COPD Disease Prediction in Lungs" in the • International Conference on DST SERB Sponsored 6th International Conference on Computer & Communication Technologies (IC3T) 2024 on 5 th October 2024 at Mohan Babu University, Sainath Nagar, Tirupathi. Presented a paper "A Safe and Observational Smart Robot System for Monitoring and Managing in Real Time using Raspberry Pi and IoT" in the International Conference on Advancements in Sustainable Energy, Materials, and Manufacturing Technology ICASMMT-2024 on 14 Sept 2024 at MLRIT, Hyderabad. Presented a paper "Probabilistic Neural Network Based Heart Rate, Auto-regressive Coefficient, and Spectrum Entropy Analysis for the Classification of Arrhythmia" in the International Conference on Advancements in Sustainable Energy, Materials, and Manufacturing Technology ICASMMT-2024 on 14 Sept 2024 at MLRIT, Hyderabad. Presented a paper "Significance of Image Matting for Fundus Images" in the International • conference NEC- ICASPC2K22 on July 23rd & 24th 2022 at Narasaraopeta Engineering College, Andhra Pradesh, India. Presented a paper "Unmanned Petrol pump using RF ID" in the Virtual - International • Conference on Advances in Signal Processing and Communications–2K21 (NEC ICASPC-2K21)Held at Department of Electronics and Communication Engineering, Narasaraopeta Engineering College, Narasaraopet during 23rd & 24th July, 2021 Presented a paper "Smart Cold Storage system using IOT" in the Virtual - International Conference on Advances in Signal Processing and Communications- 2K21 (NEC ICASPC-2K21) held at Department of Electronics and Communication Engineering, Narasaraopeta Engineering College, Narasaraopet during 23rd & 24th July, 2021 Presented a paper "Design and Implementation of Novel 4-Bit ALU" in the International Conferenceon Data Sciences, Machine Learning and Applications (ICDSMLA2019) on 29th & 30th March 2019 atCMR Institute of Technology, Hyderabad., Telangana State., India Presented a paper "Adaptive Optimizing Radiation Patterns of Smart Antennas" in the National Conference on Emerging Trends in Information, Digital & Embedded Systems (NC'e-TIDES-19) on 13th &14th March 2019 at AITS, Rajampeta., Kadapa Dist. A.P., India Presented a paper "Significance of Image Processing Techniques in Detection and Determination of Diabetes at Early Stage" in the IIAR International Conference, (ICRCNEASEMP-AUGUST 2017) on 6th & 7th August 2017. Presented a paper "Implementation of Modified Chan Vase Algorithm to Detect and Analyze • DiabeticFoot Ulcers" In IEEE International Conference, on 31st July 2017, (ICRTEECT -2017) at SR Engineering College, Hasanparthy, Warangal, Telangana State. Presented Paper "An Early Detection to Manage Diabetic Anamolies Using IR Thermal Imaging" in National Conference on Research Trends in Engineering & Technology
 - (NCRTET 2017) held on 6th MARCH 2017 at Vijayawada.

- Presented Paper "Role of Fundus and Oct Images in Diabetic Retinopathy for Detection of Exudates& Glaucoma by Image Processing Techniques" in National Conference on Emerging Trends in Information, Digital & Embedded Systems (NCe-TIDES-16) held on 16th December 2016 at Annamacharya Institute of Technology & Sciences, Rajampeta, Kadapa Dist
- Presented Paper "Highspeed Implementation of a Finite Field Multiplication Using Redundant Representation held on 17th & 18th March 2011, in NCETTECE-2K11 at LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY, Hyderabad
- Presented Paper "Design of VLSI Architecture for 2d Pipelined DWT" held on 20th & 21st February2009, in NCRTIT 2009 at PDVVP College of Engineering, AhmedNagar, and Maharashtra
- Presented Paper "Design of VLSI Architecture For 2D Pipelined DWT" held on 28th March 2009 in IVECE 2009 at MADHA Engineering College, Chennai, TamilNadu.
- Presented Paper "DWT VLSI Architecture for Image Compression" held on 19th September 2008in NCETCS 2008 at DMI College of Engineering, Chennai, TamilNadu.

PATENT DETAILS

- Computer-Implemented System for Optimizing Placement and Routing in Very Large-ScaleIntegrated Circuit (VLSIC) Design, Published on: 09/08/2019, Application No: 201941021599A
- Computer Implemented Method and System for Processing Qualitative Imaging to Detect and ForecastAbnormalities, Published on: 20/09/2019, Application No: 201941033884A
- Peak to Average Power Ratio Reduction Method for MIMO-OFDM System, Published on: 13/11/2020, Application No: 202041049074A.
- Enhancement of Quality of Service in Wireless sensor Network by Redundant Sensors Controlling, Published on "11/12/2020, Application No: 202041051968A
- Enhanced Image compression system with Parallelized Binary Search Tree Optimization Method forMedical Images" Published on: 26/02/2021, Application No: 202141007441A
- A System and the Optimal method for Fractal Image Compression of Satellite Images, Published on:05/03/2021, Application No: 202141008408A
- A Novel Method of Detecting IoT Malware using Deep Learning "Published on25/03/2022, Application No: 202241013084 A
- A System for Images Spectral Extraction using Local covariance and Convolution in Hyper spectral Images "Published on 09/09/2022, Application No: 202241050311 A
- Optimized image compression through Reinforcement Learning-based Algorithms Published on 22/12/2023, Application No.202341076525 A

OTHER DETAILS

- Best Research Scholar Award for the Year of 2021-2022 by Novel Research Academy, Puducherry on14/08/2021.
- Best Faculty/ Teacher Award for consecutive Academic Years 2021-22 & 2022-23 & 2024-25 in Narasaraopeta Engineering College.

CERTIFICATION DETAILS

- Passed **NPTEL** Certification Exam on "Introduction to Machine Learning" offered by IIT, Kharagpurin September 2023.
- Certified Digital Teacher (DTT-13502) by completing one-week online Certification course on "Digital Teaching Techniques "conducted by ICT Academy & ATOS/SYNTEL from 07/12/2020 to 12/12/2020.