Curriculum Vitae

Dr. K.Ramesha

#56, "Shivakrupa", 4th Main,

Kalyana Nagar, Nagarabhavi Road,

Bangalore - 560072

Phone No: 8310494832

Email: ramesha.ei@drait.edu.in/

kramesha13@gmail.com

Date of Birth: 13/06/1971

Father's Name: K.J.Kenchappa

CREDENTIALS/DUTIES AND RESPONSIBILITIES HANDLED AT VARIOUS LEVEL:

1. No. of PhDs produced: **05**

2. Guiding **Four** (04) PhD candidates under VTU- Belagavi.

3. Working as a **Resource Person and Coordinator** for 10 Engineering Colleges (Mentee Institutions) to help in getting NBA Accreditation under AICTE Magdarshan (Share and Mentor Institutions) Scheme since January 2020.

4. Working as **BOS Member and VTU Nominee for Dayananda Sagar Academy of Technology and Management,** Bangalore, the department of Electronics and Communication Engineering.

5. **Bangalore University, BOS Member** (external), the department of Electronics and Communication Engineering.

6. **BOS Member** (Internal), the department of Electronics and Communication Engineering, Dr.Ambedkar Institute of Technology from 2014 to 2018.

7. **BOS Member** (Internal), the department of Electronics and Instrumentation Engineering, Dr.Ambedkar Institute of Technology since 2018 to till date.

8. **BOE Member** (Internal), the department of Electronics and Communication Engineering, Dr.Ambedkar Institute of Technology from January 2014 to August 2018.

9. **BOE Member** (Internal), the department of Electronics and Instrumentation Engineering, Dr.Ambedkar Institute of Technology since September 2018 to till date.

10. Worked as **Academic Council Member** at Jain University, Bangalore from June 2012 to January 2014.

11. Worked as **BOS Chairman** at School of Engineering and Technology, Jain University, Bangalore from June 2012 to January 2014.

12. Worked as **BOE Chairman** at School of Engineering and Technology, Jain University, Bangalore from June 2012 to January 2014.

13. Worked for **"ALLIANCE UNIVERSITY"**, Bangalore as **BOS member (External)** Department of Electronics and Communication Engineering from June 2014 to June 2017.

14. **AICTE Expert Valuation Committee** (EVC) member to inspect Engineering colleges as per the directions of the AICTE for recommendations of new colleges and renewal of existing colleges.

15. Invitee to work as **VTU LIC committee member**.

PhD's Awarded:

1. PhD Scholar named Mr.Swmy T N (USN:1DA14PEM02), Thesis Titled "Low Power Architecture On Intra-prediction Mode Decision For HEVC Encoder" under VTU, Belagavi in the year 2023.

2. PhD Scholar named Mr.Sidram Swamy Matad (USN:1DA15PEJ13), Thesis Titled "Development of Optimized algorithm for PAPR Reduction in MIMO-OFDM System" under VTU, Belagavi in the year 2023.

3. PhD Scholar named Mr.Naveen K N (USN:1DA15PEJ06), thesis Titled "Development and Performance Analysis of Ranging Algorithms for OFDMA Systems" under VTU, Belagavi in the year 2022.

4. PhD Scholar named Mr.Boppuru Rudra Prathap, Thesis Title "Spatio Temporal Crime Analysis and Forecasting using Social Media Data" under Christ University, Bangalore, in the year 2020.

5. PhD Scholar named Mr.Prasanna Kumar A M, Thesis Titled "Performance Analysis of Adaptive Algorithms for Mobile Applications" under VTU, Belagavi in the year 2019.

Work Experience:

Over 28 years of experience in Teaching as a Lecturer, Senior Lecturer, and Assistant professor, Associate Professor, Professor & Head of the Department in Engineering Colleges and 1.5 years of experience in industry, and 16 years of Research experience.

Educational Qualification:

1. **Ph.D in the area of Image Processing** from Jawaharlal Nehru Technological University (JNTUH), Hyderabad, under the guidance of Dr. K. B. Raja, Professor, UVCE, Bangalore. (Year of passing: 2013).

2. **M.Tech (Electronics)** from B.M.S College of Engineering, Bangalore, Visvesvaraya Technological University (VTU), with **72%** (Year of passing: 2001)

3. **B.E (Electronics & Communication)** from V.E.C, Bellary, Gulburga University, Bellary with **68%** (Year of Passing: 1993).

Research Interests:

Image Processing, Biometric Applications, Communication, VLSI, Digital Signal Processing and Machine Learning & Artificial Intelligence.

Research Patents/Copyrights:

1. **International Patents**: Patent in the Name: Dr.K.Ramesha, *Patent Application Number*: 20 2022 100 691, *Patent title*: "System for Unmanned Intelligent Patrol Electric Vehicles with Mobile Payment", IPC: G06Q 20/14, *Patent filed date*: 07.02.2022, *Patent granted date*: 15.02.2022, *Validity of the patent*: 20 Years from the date of filing, *for more details:* Please visit the website: www.dpma.de/english/search/index.html.

2. **Indian Patent published,** Patent in the Name: Dr.K.Ramesha *, Title*: "Synthesis of E-Waste Based on Machine Learning & Artificial Intelligence Autonomous Management System for Smart Environment", *Patent No.*:202141044783, *dated*: 2/10/2021.

3. **Patent filed**: Patent in the Name of Dr.K.Ramesha , No.: 202041042274 dated 29-09-2020 under Dr. Ambedkar Institute of Technology, Bengaluru

560056, India Titled: "Novel Audio-Video Device for Teaching a Foreign Language to the People of Different Mother Tongue Simultaneously".

4. **Copy right Obtained:**

Class and description of the work: Literary/ Dramatic Work ML and IOT Based Model to Predict the Severity of Cancer for Surgical Treatment. *Title of the work:* ML and IOT Based Model to Predict the Severity of Cancer for Surgical Treatment.

Registration Number: L-110023/2021

Diary Number: 24296/2021-CO/L

Awards/Recognitions received:

1. **Editorial Board Member:** *Edwin Group of Journals,* with Editorial Membership No.:003736687929. Find attached the link for the same: https://www.edwinincorp.com/Editorial-Board.

2. **Editorial Board Member:** Scienxt Journal of Emerging Technologies in Electronics Engineering (SJEEE). Find attached the link for the same: https://scienxt.com/sjeee-editorial-board/.

3. **Honor:** Medal and Certificate by Novel Research Academy, Puducherry, India under National Faculty Awards 2020-2021 as Best Research Supervisor Award during the academic year 2021-2022.

4. **Worked as Session Chair,** IEEE International Conference on Advances in Recent Technologies in Communication and Computing, ARTCOM 2009, Kottayam, Kerala, ACEEE and IEEE-Computational Intelligence Society.

Research Papers published Identification Details:

ORCID ID: https://orcid.org/0000-0002-7021-1335

Web of Science Id: AAF-5832-2021

Scopus Id: 57221814284/ 57203168282

Google Scholar Id: WM0DQR8AAAAJ

Researcher Id: AAF-5832-2021

Membership of Professional Bodies:

1. Life Member, membership No.: LM 71372, Indian Society for Technical Education (ISTE), New Delhi.

2. Member, membership No.:M192319, Institution of Electronics and Telecommunication Engineers (IETE), New Delhi.

3. Member of Institution of Engineering and Technology (IET) London, UK in the year 2013.

Conference/Workshops Organized:

1. Organized One week FDP on OBE: In perspective to NEP 2020 under AICTE Margadarshan Scheme to all Mentee Institutions at Dr.AIT, Banaglore on 13-18, December 2021.

2. Organized One week FDP on Outcome Based Education and NBA Accreditation under AICTE Margadarshan Scheme to all Mentee Institutions at Dr.AIT, Banaglore on 22-27, February December 2021.

3. Organized under TEQIP-III One Day Webinar for Faculty and students on Machine Learning Approaches for Image Analysis on 19/09/2020.

4. Worked as Organizing Committee Member for the conduction of Fifth National Conference on Control Systems & Optimization (CCSO 2019) under TEQIP-III held on 25th and 26th April 2019 at Dr.AIT, Bangalore.

5. Organized Three Days Industrial Visit to KIOCL, Mangalore and Varahi Hydro Power Plant, Udupi on 21-23, March 2019 for Fourth Semester students.

6. TEQIP-III sponsored Three Days workshop on DSP Applications Design by using 6713 DSK is organized on 20-22, February 2019 at EIE Department, Dr. Ambedkar Institute of Technology.

7. TEQIP-II sponsored Two Days workshop on VLSI and Embedded Systems is organized on 28-29, April 2016 at ECE Department Dr. Ambedkar Institute of Technology.

8. Industrial exposure Training on VLSI Chip fabrication process at Gallium Arsenide Enabling Technology Centre (GAETEC), Hyderabad, from 29/4/2015 to 30/4/2015.

9. As a Head of the Department and Convener, organized National Conference titled *National Conference on Embedded Systems and Signal Processing* (NESP 2014), on 23-25 Jan 2014, at SET, Jain University, Bangalore.

Expert Lectures Delivered:

No. of Invited talks/expert lectures delivered on NBA and OBE at various Institutes: **17**

International Journal/Conference papers published:

International Journals:

[1]. Shruthi N, K.Ramesha, "A Deep Learning Based Hybrid Precoding Scheme with Limited Feedback Approach for Improved Compression and Minimized Reconstruction Error in Massive MIMO", International Journal on Journal of Advances in Information Technology, Vol. 16, No. 1, pp-91-100, 15 January 2025, Indexing in **ESCI (Web of Science), Scopus, CNKI- Q3, SJR 2023:0.32,** doi: 10.12720/jait.16.1.91-100.

[2]. Shruthi N, K.Ramesha, "A Hybrid NOMA System for 5G Communications by Incorporating Puncturing, Interleaving and Turbo Coding Techniques", International Journal on Advanced Engineering Science, vol.56, issue 07, pp.4803-4814, July 2024, **Scopus Indexed-Q2 SJR Journal**.

[3]. K.Ramesha, Bhavani A, Indraja M V, Jyothika B H and Nisha B, "Smart Farmer's Assistance for Crop Protection using IOT", International Journal of Innovative Research in Technology, Vol.11, Issue 01, pp. 762-768, June 2024, **UGC Care**, ISSN: 2349-6002.

[4]. Ambika Naik Y, Dr. Ramesha K, Dr. Basavaraju C, "Detection of primary glaucoma using a hybrid combination of fuzzy c-means clustering algorithm and level-1 support vector machine algorithm", Published in International Neurourology Journal, Vol. 27, issue. 4, pp.1252-1262, 2023**.** doi: 10.5123/inj.2023.4.in142, **Scopus Indexed-Q2 Journal**.

[5]. Dr.K.Ramesha, and Dr.Ganapathi V Sagar. "E-Vehicle Charging Station using Solar Renewable Energy with IOT", International Journal of Current

Science (IJCSPUB), ISSN: 2250-1770, Vol.13, Issue 4, pp.230-239, October 2023, URL : http://www.ijcspub.org/IJCSP23D1027, **UGC Care Journal**.

[6]. Swamy T N, Ramesha K, "Low Power Intra Prediction Architecture For HEVC Encoder Using Deep Learning Approach", Published in International Journal of Current Science (IJCSPUB), vol. 12, Issue 4, pp.24-31, November 2022, ISSN: 2250-1770, **UGC Care Journal**.

[7]. Swamy T N, Ramesha K, "Improved Intra Prediction Algorithm for HEVC with Conventional and Convolutional Neural Network Approach", Published in International Journal of Mathematical Statistician and Engineering Applications, vol.71, No.2, pp. 272-280, April 2022, ISSN: 2326-9865. **Scopus Indexed**.

[8]. K.Ramesha, Naveen K.N, "Wearable Sensing and Telehealth Technology with Potential Application in Corona Virus Pandemic", Published in International Journal of Scientific Research in Engineering and Management (IJSREM), vol.06, issue 07, pp.1-13, July 2022, Impact Factor: 7.185, DOI: 10.55041/IJSREM15621, ISSN: 2582-3930. **UGC Care Journal.**

[9]. Siddaramayya S M Dr.K.Ramesha, "Precoding Aided Data Correlation Scheme for Channel Estimation Technique in MIMO-OFDM System", WSEAS TRANSACTIONS on SYSTEMS and CONTROL, pp.146-154, vol.16, February 2021. **Scopus Indexed**.

[10]. Naveen K. N. & K. Ramesha, "Joint Initial Uplink Synchronization and Interference Aware Resource Allocation for D2D Communication in the MU-OFDMA System" published in IETE Journal of Research, vol. 69(6), pp. 3222-3241, 26 Apr 2021, **SCI_Scopus Indexed Journal**, https://doi.org/10.1080/03772063.2021.1912656

[11]. Siddaramayya S M Dr.K.Ramesha, "A Forward Error Correcting Scheme by using Concatenated Polar and Convolution Codes with Belief Propagation Decoding in MIMO-FDM Systems", International Journal of Engineering Trends and Technology, Vol. 69 Issue 7, pp.1-9, July, 2021, **Scopus Indexed**, ISSN: 2231 – 5381, doi.org/10.14445/22315381/IJETT-V69I7P201.

[12]. Boppuru Rudra Prathap and K.Ramesha, "Spatio-Temporal Crime Analysis using KDE and Arima Models in Indian Context", Published in International Journal of Digital Crime and Forensics, vol.12, issue.04, pp.1-19, Oct-Dec 2020, **Web of Science**, DOI: 10.4018/IJDCF.2020100101

[13]. Naveen K N and K.Ramesha, "Multi-phase initial process for OFDMA systems: improved dynamic threshold-based multi-user detection approach", International Journal of IET Communications (IETE-The Institution of Engineering and Technology), Research Article, pp. 2130-2140, August 2020, **SCI_SCOCUS** Indexed Journal, https://doi.org/10.1049/iet-com.2019.0936.

[14]. Boppuru Rudra Prathap and K.Ramesha, "Geospatial Crime Analysis to Determine Crime Density using Kernal Density Estimation for the Indian Context", International Journal of Computational and Theoretical Nanoscience, vol.17, no.1, pp.74-86, Jan 2020, **Scopus Indexed**.

[15]. Swamy T N and K.Ramesha, "Video and Image Acquisition Challenges to Define Image Resolutions for HEVC", Published in International Journal of Advanced Science and Technology, vol.29, no.5s, pp.958-965, June 2020**, Scopus Indexed**.

[16]. Siddaramayya S M Dr.K.Ramesha, "MIMO-OFDM Communication System: A Survey, PAPR Reduction, Precoding and Error Correcting Codes", Published in International Journal of Scientific & Technology Research, vol.9, issue.02, pp.2743-2754, Feb2020, **Scopus Indexed.**

[17]. Siddaramayya S M Dr.K.Ramesha, "GSA based PSO-PTS model for PAPR reduction in OFDM and MIMO-OFDM Systems", Published in International Journal of Advanced Sciences and Technology, vol.29, no.7s, pp.5714-5724, 2020, ISSN:2277-8616, **Scopus Indexed.**

[18]. Sanjana R Chavan, Yashaswini J and Dr.K.Ramesha, "Droneillance-Aviation through Eagl's Eyes", Published in International Research Journal of Engineering and Technology, vol.07, issue.09, pp.3110-3119, September 2020, e-ISSN: 2395-0056, IFV: 7.529, **UGC Care Journal.**

[19]. Naveen K N, K. Ramesha and Harshaveni, "Performing Ranging Process on OFDMA System Using MMLD Algorithm for Improving Timing Offset Estimation," UGC Care Group 'II' Journal AND Web Of Science, *Fronteiras*

Journal of Social, Technological and Environmental Science, ISSN: 0042-9945, vol.10, issue 1, no.2, Issue 8, pp. 09-20, Jan 2019, **Web of Science.**

[20]. Boppuru Rudra Prathap and K.Ramesha, "Geo-spatial Crime Analysis using newsfeeds data in Indian Context", International Journal of Web-Based Learning and Teaching Technologies, vol.14, issue 4, pp.49-64, Sept 2019, **Web of Science-Scopus Indexed**.

[21]. Naveen K N and K. Ramesha, "Improved and Effective Uplink Synchronization in OFDMA System" International Journal of Information and Computational Science, ISSN: 1548-7741, vol.9, issue 11, pp. 71-83, Sept 2019.

[22]. Boppuru Rudra Prathap and K.RameshaA, "A Pragmatic Study on Heuristic Algorithms for Prediction and Analysis of Crime using Social Media Data", published in International Journal of Advanced Research in Dynamical & Control Systems, vol.11, special issue 02, pp.30-40, Nov 2019, **Scopus Indexed.**

[23]. Boppuru Rudra Prathap and K.Ramesha, "An Overview of Heuristic based Crime Prediction and Analysis using Social Media Data", published in International Journal of Emerging Technologies and Innovative Research, vol.5 issue 12, pp.582-590, Dec 2018, **UGC Journal.**

[24]. A M Prasanna Kumara and K. Ramesha, "AFNCS: An Intelligent Adaptive Filter Based Noise Cancellation System for Mobile Communications," International Journal of Emerging Technologies and Innovative Research, ISSN: 2349-5162, vol.5, Issue 9, pp. 644-650, September 2018.

[25]. A M Prasanna Kumara and K. Ramesha, "Adaptive Filter Algorithms based Noise Cancellation using Neural Network for Mobile Applications," International Journal of Advances in Intelligent Systems and Computing, pp. 67-78, September 2018, **Springer Book Chapter, Scopus Indexed.**

[26]. Harshaveni, Naveen K N, and K.Ramesha, "Multi-user Ranging Code Detection in OFDMA System using MMLD Algorithm for Improving Detection Performance", published in International Journal on Recent and Innovation Trends in Computing and Communication,(IJRITCC), vol.6, issue.6, pp.1326-1331, 30 June 2017, ISSN:2321-8169.

[27]. Naveen K N, K.Ramesha, and Harshaveni, "Performing Ranging Process on OFDMA System using MMNL Algorithm for Improving Timing Offset Estimation", published in Frontiras: Journal of Social, Technological and Environmental Science, vol.6, no.2, pp.496-507, May-June 2017, ISSN:2238-8869.

[28]. A M Prasanna Kumara and K. Ramesha, "Adaptive Algorithms Performance Analysis for Noise Cancellations using Neural Networks employing real time signals," International Journal of Innovative Science, Engineering & Technology, vol.4, issue 6, pp. 393-402, June 2017.

[29]. Diwakar K R, Swamy T N and K.Ramesha, "A Dynamic Parallel and Pipelined Architecture for Intra Prediction in H.265 Standard", Published in International Journal of Recent and Innovation Trends in Computing and Communications, vol.5, issue.06, pp.1073-1077, June 2017.

[30]. Sowmy.D and Dr.K.Ramesha, "Implementation and Analysis of Multi-Processing Processor Using Data Encryption Standard on FPGA", *International Journal of Engineering and Computer Science*, ISSN: 2319-7242, vol.5, issue 5, pp.16652-16657, May 2016.

[31]. Mani Laxman Aiyar and Ramesha K, "A High-Performance and High-Precision Sub-Pixel Motion Estimator-Interpolator for Real-Time HDTV(8K) in MPEGH / HEVC Coding", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS), pp.1-8, 2016.

[32]. Mani Laxman Aiyar and Ramesha K, "A highly accurate, high-precision sub-pixel motion estimator-interpolator for high-performance Video coding (HEVC) in next generation UHDTV applications", Third International Conference on Recent Advances in Information Technology (RAIT) , pp.139-146, 2016, **Scopus Indexed**.

[33]. Mani Laxman Aiyar and Ramesha K "A 2260 GOPS High-Performance and High-Precision Sub-pixel Motion Estimator-Interpolator for Real-Time 8K UHDTV for HEVC Coding in Next Generation Wireless Multimedia Applications", IEEE Sixth International Conference on Advanced Computing (IACC), pp. 695-700, 2016, **DOI:** 10.1109/IACC.2016.134 **Scopus Indexed.**

[34]. Mani Laxman Aiyar and Ramesha K, "A High-Precision and Highly Accurate Sub-Pixel Motion Estimator-Interpolator for High-Performance High Efficiency Video Coding (HEVC) in Next Generation HDTV Applications", International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), pp. 1878-1885, 2016, **DOI:** 10.1109/WiSPNET.2016.7566468, **Scopus Indexed.**

[35]. Sowmy.D and Dr.K.Ramesha and Guruprasad S P, "A Survey on Cryptography Algorithms for Network Communication", *International Journal of Engineering Science and Computing*, ISSN: 2319-7242, vol.6, Issue 5, pp.6188-6190, May 2016.

[36]. A M Prasanna Kumara and K. Ramesha, "Performance Analysis of Adoptive DOA Estimation Algorithms for Mobile Applications," International Journal of Engineering Research and Applications, vol.5, issue.7 (part-2), pp.68-73, July 2015.

[37]. Harsha.R and Dr.K.Ramesha, "DWT Based Feature Extraction for Iris Recognition", *International Journal of Advanced Research in Computer and Communication Engineering*, ISSN: 2278-1021, vol. 4, issue 5, pp.300-3016, May 2015.

[38]. Gouri B. Deshpande and Dr. K. Ramesha, "MRI Brain Image Enhancement Using XILINX System Generator and DWT, *Bonfring International Journal of Advances in Image Processing*, ISSN: 2277-503X, vol. 5, No. 2, pp.16-22, May 2015.

[39]. Swamy T N, Dr. K Ramesha and Dr. Cyril Prasanna Raj, "A New Technique to Digital Image Watermarking Using DWT for Real Time Applications," *International Journal of Engineering Research and Applications,* ISSN: 2248-9622, vol. 4, issue 8 (Version 2), pp.102-107, August 2014.

[40]. Vasudha M P and Ramesha K, "Fusion Technology for Robust Human Skin Detection," International *Journal of Advanced Research in Engineering and Technology (IJARET*), ISSN No. 0976– 6480(Print), ISSN 0976 – 6499(Online) Volume 4, Issue 5, pp. 63-73, July August 2013. Journal Impact Factor (2013): **5.8376.**

[41]. Raju Kumar, K. Gopalakrishna and K. Ramesha, "Intelligent Shopping Cart," *International Journal of Engineering Science and Innovative Technology* (IJESIT), vol. 2, issue 4, pp.499-507, July 2013, ISSN: 2319-5967.

[42]. Sindhushree. K. S, Mrs. Manjula. T. R and K. Ramesha, "Detection and 3D Reconstruction of Brain Tumor from Brain MRI Images," *International Journal of Engineering Research & Technology (IJERT)*, vol. 2 issue 8, pp.528-534, August 2013, ISSN: 2278-0181.

[43]. Nischitha.K, Mahendra Rajan.V and Ramesha K, "An Hybrid Approach for Image Restoration," *International Journal of Innovative Research in Science, Engineering and Technology*, vol. 2, issue 8, pp.528-534, August 2013, ISSN No.: 2319-8753.

[44]. Ramesha K and K B Raja, "Dual Transform based Feature Extraction for Face Recognition," *International Journal of Computer Science Issues,* vol. 8, issue 5, no. 2, September 2011, pp. 115-124, ISSN (Online): 1694-0814.

[45]. Ramesha K and K B Raja, "Gram-Schmidt Orthogonalization based Face Recognition using DWT*," International Journal of Engineering Science and Technology*, vol. 3, no. 1, January 2011, pp. 495-504, ISSN No. 2278–9510 (Print), ISSN :0975- 5462 (Online).

[46]. Ramesha K, K B Raja, Venugopal K R and L M Patnaik, "Template based Mole Detection for Face Recognition," *International Journal of Computer Theory and Engineering*, vol. 2, no. 5, October 2010, pp. 797- 804, ISSN: 1793-8201.

[47]. Ramesha K, K B Raja, Venugopal K R and L M Patnaik, "Feature Extraction based Face Recognition, Gender and Age Classification." *International Journal on Computer Science and Engineering,* vol. 02, No. 01S, 2010, pp. 14-23. ISSN: 0975-3397.

International/National Conference:

[48]. Ramesha K Presented a paper on OFDM and VSC-OFDM System" in SBBIT International E-Conference on APPLICATIOBS OF Intelligent Computing (ICAIC-2020) held on 27th & 28th November 2020 organized by ECE Department in association with VTU, Belagavi.

[49]. Boppuru Rudra Prathap and K.Ramesha, "Geospatial Crime Analysis to Determine Crime Density using KDE for the Indian Context", published in First International Conference on Intelligent Computing (ICIC 2018) organized at Amrita School of Engineering, 2018.

[50]. Boppuru Rudra Prathap and K.Ramesha, "Twitter Sentiment for Analysing Different Types of Crimes", published in IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT), pp.484-488, 2018, **Scopus Indexed.**

[51]. Boppuru Rudra Prathap and K.Ramesha, "A Literature Survey on Heuristic Algorithms to Predict Crime using Social Media Data", published in International Conference on Sustainable Advanced Computing (ICSAC 2018), pp.14-19, 2018.

[52]. Boppuru Rudra Prathap and K.Ramesha, "Geo-Spatial Crime Analysis using Newsfeed data in Indian Context", published in Second International Conference on Innovations in Computing organized at Christ University 14-5, December 2018, **Scopus Indexed**.

[53]. Sidramayya SM and Dr. K. Ramesha, "An Overview of orthogonal Frequency Division Multiplexing System," Presented paper in 3rd International Conference on Electrical, Electronics, communication, Computer Technologies and Optimization techniques (ICEECCOT),14-15, December 2018, **Scopus Indexed.**

[54]. K Ramesha, "Geospatial Crime Analysis to determine Crime Density Using KDE for Indian Context," presented paper in 1st International Conference on Intelligent Computing (ICIC'18), 25-27, October 2018, **Scopus Indexed.**

[55]. Sidramayya SM and Dr. K. Ramesha, "OFDM and VSC OFDM Systems," Presented paper in International Conference on Recent Innovations in Electrical, Electronics and Communication Engineering (ICRIEECE), 27-28, July, 2018.

[56]. Naveen K N and K. Ramesha, "MMLD Algorithm for Power Estimation in OFDMA System," IEEE International Conference on Inventive Communication and Computational Technologies, pp. 280-286, September 2018.

[57]. Swamy T N, K.Ramesha and Diwakar K R, "An Efficient Algorithm for Intra Prediction in HEVC/H.265 Standard for 16x16 Pixels", Published in International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques (ICEECCOT), pp.227-233, 2017, **Scopus Indexed.**

[58]. Ramesha K, Varaprada Adiga, Siddu N, K B Raja, Venugopal K R and L M Patnaik, "Feature Based Face Recognition using Mole Detection," *Proceedings of IEEE International Conference on Emerging Trends in Computing*, Madurai, TN, India, 2008, pp. 65-70.

[59]. Ramesha K, Srikanth N, K B Raja, Venugopal K R and L M Patnaik, "Advanced Biometric Identification on Face, Gender and Age Recognition," *Proceeding of IEEE International Conference on Advances in Recent Trends in Communication and Computing*, 27-28 Oct. 2009, Kottayam, Kerala, India, pp. 23-27, **E-ISBN:** 978-0-7695-3845-7, **Print ISBN:** 978-1-4244-5104-3, **Scopus Indexed.**

[60]. Ramesha K and K B Raja, "Performance Evaluation of Face Recognition based on DWT and DT-CWT using Multi-matching Classifiers," *Proceeding of the IEEE International Conference on Computational Intelligence and Communication Networks,* 7-9 Oct 2011, Gwalior, India, pp. 601-605. ISBN: 978-0-7695-4587-5, **Scopus Indexed.**

[61]. Ramesha K and K B Raja, "Face Recognition System using Discrete Wavelet Transform and Fast PCA," *Proceedings of International Conference on Advances in Mobile Computing*, Springer-Verlag Berlin Heidelberg, CCIS 147, April 21-22 2011, Nagpur, India, , pp. 13-18, **Print ISBN:** 978-3-642-20572-9, **Online ISBN:** 978-3-642-20573-6.

[62]. Dr.K.Ramesha and Vasuda M P "Frequency Imaging with Fusion Technology for Human Skin Detection", Proceedings of National Conference on Embedded Systems and Signal Processing, NESP-2014, Organized by Department of Electronics and Communication Engineering, School of Engineering and Technology, Jain University, Bangalore on 23-24 January 2014.

[63]. Dr.K.Ramesha and Gowri B. Deshpande, "Design and Implementation of MRI Image Enhancement using XILINX System Generator", Proceedings of

National Conference on Computational Control Systems and Optimization-CCSO2015 under TEQIP-II, 23-24, April 2015, Dr.AIT, Bangalore-56.

[64]. T N Swamy, K Ramesha, "An efficient algorithm for intra prediction in HEVC/H.265 standard for 16×16 pixels", Proceedings of International Conference on Electrical, Electronics, Communication, and Optimization Techniques, 15-16, December, 2017.

International/National Conference Sessions Chaired:

1. Chaired the sessions IA, IIIA, and IIIB on 27th and 28th October 2009 in the International Conference on Advances in Recent Technologies in Communication and Computing, ARTCOM 2009, Kottayam, Kerala, which is organized by the ACEEE and IEEE-Computational Intelligence Society.

2. Chaired the Technical session paper presentation competition in the Third National Conference on Computational Control Systems and Optimization-CCSO 2015 under TEQIP-II, held on 23rd and 24th April 2015, Dr.AIT, Bangalore.

3. Chaired the Technical session paper presentation competition in the National Conference on Recent Trends in Electronics and Communication Engineering-NCREC 2016, held on 5th May 2016, at SKIT, Bangalore.

Subjects Taught:

VLSI Testing and Verification, Digital System Design using Verilog, Reconfigurable Computing, Digital signal processing, Digital Image Processing, Signals and systems, Control Systems, Electrical and Electronic Measurements, Logic Design, Basic Electronics, Information theory and coding, Wireless Communication, Mobile Communication, Digital Electronics fundamentals, Linear integrated circuits, Electronics circuits, MATLAB.

Labs Handled:

Analog electronics lab, Digital Electronics lab, Communication lab, VHDL Lab, Microprocessor Lab, CCN / DSP Lab.

Guided more than 15 M.Tech and 60 B.E. Projects.

Courses done:

1. Done NPTEL Online Certification FDP course on "**Digital Image Processing**" from June-October-2019 (12 Weeks) with No. of Credits: 03, funded by MHRD, Govt. of India.

2. Done NPTEL Online Certification FDP course on "**Digital Circuits**" from August-November 2020 (12 Weeks) with No. of Credits: 03, funded by MHRD, Govt. of India.

3. Course on Digital Image Processing using MATLAB, conducted by MSRSAS, Bangalore from 2/1/2009 to 14/2/2009, of 40 hours of training.

4. Course on Digital Signal Processing and Applications held from 29 July 2002 to 14 August 2002, conducted by the Dept. of E&C, UVCE, and sponsored by AICTE and Bangalore University.

5. Undergone 21 days course on Advanced Microprocessor and PC Training, conducted during 18 January 1999 to 11 February 1999, organized by E&C Dept., UVCE and sponsored by AICTE.

Workshops/FDPs/National/International Conferences/Technical Symposium/Seminars attended:
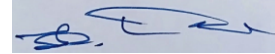
1. Attended AICTE sponsored STTP on "Pedagogy for effective use of ICT in Engineering Education" organized by Department of Electronics and Instrumentation Engineering, Dr.AIT, Bangalore from 04th to 09th January 2021.

2. Attended TEQIP-3 sponsored Five Days Faculty Development Program (FDP) on "E-Content Creation for MOOCS and MOODLE", during 10-14, July 2020 through Video Conferencing hosted by Institute of Engineering & Technology, Dr.Rammanohar Lohia Avadh University, Ayodhya, U.P.

3. Attended TEQIP-3 and Virtual Labs sponsored Five Days National Workshop on "Learning by Performance Through Virtual Lab", during 1-5, July 2020 through Video Conferencing hosted by Institute of Engineering & Technology, Dr.Rammanohar Lohia Avadh University, Ayodhya, U.P.

4. Attended AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence and Machine Learning Applications in Biomedical Engineering" from 21/09/2020 to 25/09/2020 at University BDT College of Engineering, Davangere.

5. Attended One Day Webinar on "Insights in to Nano Technology", held on 06/08/2020 organized by the Department of Electronics and Communication Engineering at Dr.Ambedkar Institute of Technology, Bangalore.

6. Attended International Webinar on "SCI Paper and Research Proposal Writing", held on 14/08/2020 organized by the Department of Industrial Engineering and Management at Dr.Ambedkar Institute of Technology, Bangalore.

7. Attended One Day Webinar on "Artificial Intelligence- Opportunities and Challenges", held on 03/07/2020 organized by the Department of Computer Science and Engineering at Dr.Ambedkar Institute of Technology, Bangalore.

8. Attended One Day Webinar on "Advances in IOT and Its Applications", held on 10/06/2020 organized by the Department of Electronics and Communication Engineering at Dr.Ambedkar Institute of Technology, Bangalore.

9. Attended One Day Webinar on "Xilinx FPGA Design Flow", held on 19/08/2020 organized by the Department of Electronics and Communication Engineering at Dr.Ambedkar Institute of Technology, Bangalore.

10. Attended Three Days National Symposium on "National Education Policy-2020 and Technical Education", held during 17-19, Dec2020 organized by Dr.Ambedkar Institute of Technology, Bangalore.

11. Attended One Week AICTE sponsored Short Term Training Program (STTP) on "Open Source Platform and its Tools" conducted from 21st - 26th October 2019 organized by Department of EIE, Dr.AIT, Bangalore.

12. Attended Three Days National Workshop on "Design and Development of Nano Satellite" from 3rd-5th July 2019, organized by

Dayananda Sagar University in Association with IEEE Bangalore Section and Planet Aerospace, Bangalore.

13. One day National Symposium on "The Internationalization of Higher Education: A Paradigm Shift" organized by IQAC of Dr.AIT on 18th December 2018.

14. Three days FDP on Remote Learning and MOOC and SCILAB from 3rd to 5th October 2018, jointly organized by Department of Electronics and Communication Engineering, Dr. AIT, Bengaluru and IET, Faizabad in Association with IIT, Bombay, under TEQIP-III.

15. Three Days workshop on VLSI Testing and Verification from 11th to 13th April 2018, organized by Department of Electronics and Communication Engineering, Dr. AIT under TEQIP-III.

16. Advances in Digital Image Processing held on 17th and 18th October 2008, under TEQIP, UVCE, Bangalore.

17. National Workshop on Latest Trends in Embedded Systems held on 27th September 2008, organized by the E&C Dept., NHCE, and Bangalore.

18. Regional Workshop on Intellectual Property Rights organized by BEC Bagalkote and MHRD Govt. of India, on 16th April 2004.

19. National Workshop on Biosensors, conducted by BVBCE, Hubli, on 14th and 15th November 2003.

20. One day workshop on Outcome based Education and Accreditation on 20th February 2016, sponsored by TEQIP-II, organized at Dr.AIT, Bangalore.

21. Two Days workshop on VLSI and Embedded Systems sponsored by TEQUIP-II and conducted from 28-29, April 2016 at Dr. Ambedkar Institute of Technology.

22. One week AICTE recognized Short Term Course on Institutional Accreditation (NBA Guidelines) and Quality Management through ICT conducted by Media and Continuing Education Centre from 18-22, July 2016 by sponsored by MHRD, NIITTR-Chandigarh, organized at Dr.Ambedkar Institute of Technology, Bangalore.

23. Attended One day ELECTROTECH 2016 symposium organized by ECE Department on October 04, 2016.

24. Two Days workshop on Hands-on-Training on QUALNET conducted by TCE Department, Dr.AIT, on 22-23, September 2015.

25. Second International Conference on Information Processing (ICIP2008) by UVCE, Bangalore.

26. Advances in Analog and Mixed Mode VLSI Design held on 28th February 2009, organized by the Department of Electronics and Communications Engineering, NHCE, Bangalore.

27. Seminar on Emerging Applications in DSP & Embedded Area held on 9th September 2002 at IISc. Bangalore, organized by Cranes Varsity.

(Dr. K. RAMESHA)