

Name of Faculty Dr. KATTA SUGAMYA  
 Designation Assistant Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 13 - 09 -2005  
 E-mail ksugamya\_it@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (CSE)	Awarded
PG	M. Tech. (CSE)	Distinction
UG	B. E. (ECE)	Second

Work Experience

Teaching	19 Years
Research	06 years
Industry	01 year
Others	--

Area of Specialization Embedded systems, Image Processing and Internet of Things

Professional Memberships Life member IETE -M177243

Responsibilities held at Institution Level

1. Member, SC&ST Cell, from 15-10-2019 to till date.
2. Member, CBIT News Letter committee, from 01-07-2012 to till date.

Responsibilities held at Department Level

1. Member Board of Studies, 30-06-2014 to till date
2. Coordinator, M. Tech (CNIS), from 01-09-2016 to 30-08-2018.
3. Coordinator, M. Tech (AI&DS), from 01-10-2022 to till date
4. Member, Course Expert Group.

Research Guidance --

Awards Received --

Courses Handled at Under Graduate / Post Graduate Level. Embedded Systems, Internet of Things, Digital Electronics and Logic Design, VLSI Technology, Digital Signal Processing, Data Communications, Data Hiding.

No. of Papers Published National Journals – International Journals – 11  
 National Conference – 01 International Conference – 09

Projects Carried out --

Patents --

Technology Transfer --

Invited Speaker --

No. of Books/Chapter Published with details

1. K. Sugamya, Suresh Pabboju, and P. Sathish ,” A smart system for monitoring elderly people comfort living using IoT” AIP Conference Proceedings 2516, 150001 (2022); <https://doi.org/10.1063/5.0109066>
2. Sugamya Katta, Sangita Ramatenki, Harika Sammeta, “Smart irrigation and crop security in agriculture using IoT” book chapter of AI, Edge and IoT-based Smart Agriculture in Intelligent Data-Centric Systems, 2022, Pages 143-155 <https://doi.org/10.1016/B978-0-12-823694-9.00019-0>
3. Sugamya, K. Srinikitha, N. and Spandana, C., A Dynamic Density Based Traffic Control System Using IoT (July 10, 2021). 2nd International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS 2021), Proceedings of the International Conference on IoT Based Control Networks & Intelligent Systems - ICICNIS 2021, Available at SSRN: <https://ssrn.com/abstract=3883885> or <http://dx.doi.org/10.2139/ssrn.3883885>

4. Sugamya, K., Suresh, P., Vinaya Babu, A., Akhila, R.," CBIR using SIFT with LoG, DoG and PCA" Advances in Intelligent Systems and Computing 1079, pp. 623-637 , 2020.
5. Suraj, Sneha Reddy, Sugamya Katta, published a book chapter on "Realistic Handwriting Generation Using Recurrent Neural Networks and Long Short-Term Networks" in Springer AISC Book series, DOI: 10.1007/978-981-15-1480-7\_55, March 2020
6. Katta Sugamya, Suresh Pabboju, AVinaya babu "A Comparative Analysis for CBIR Using Fast Discrete Curvelet Transform " © Springer Nature Singapore Pte Ltd. 2017 H.S. Saini et al. (eds.), Innovations in Computer Science and Engineering, Lecture Notes in Networks and Systems 8, DOI 10.1007/978-981-10-3818-1\_3
7. Kothapalli Swathi, Sambu Ravali, Thadisetty Shravani Sagar and Katta Sugamya " Taxonomy of Polymer Samples Using Machine Learning Algorithms" © Springer Nature Singapore Pte Ltd. 2017
8. K Sugamya, S Pabboju, AV Babu " A CBIR classification using support vector machines " IEEE Xplore: 05 December 2016 DOI: 10.1109/RAINS.2016.7764388
9. K Sugamya, S Pabboju, AV Babu ," Image enhancement using singular value decomposition "IEEE Xplore: 05 December 2016, DOI: 10.1109/RAINS.2016.7764388
1. Participated in One Week National Level Online Faculty Development Program on Societal Applications of Machine Learning from 26-30 December 2022 organized by the department of CSE at Shri Vishnu Engineering College for Women (A), Bhimavaram.
2. Participated in the One Week Short Term Training Programme on "Cyber Security" jointly organized by Department of Computer Science & Engineering and Department of Information Technology, Chaitanya Bharathi Institute of Technology (Autonomous) during 16-20 May 2022.
3. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "INDUSTRIAL INTERNET OF THINGS USING LABVIEW" from 03/01/2022 to 07/01/2022 at KLE Dr. M.S. Sheshgiri College of Engineering & Technology, Belagavi.
4. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Augmented Reality (AR)/ Virtual Reality (VR)" from 21/02/2022 to 25/02/2022 at NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND.
5. Five Day International Workshop on "Building Data-Driven Solutions Using Data Analytics with ML and DL Algorithms" held virtually during 24 - 28 June, 2021 Department of CSE, CBIT(A), Hyderabad, Telangana.
6. Successfully completed "Programming for Everybody (Getting started with Python)" an online non-credit course authorized by University of Michigan and offered through Course era on 03-05- 2020.
7. Successfully completed "Introduction to Data Science using Python" an online non-credit course authorized by University of Michigan and offered through Course era on 21-05-2020.
8. ATAL Academy Online FDP on "Data Science" at International Institute of Information Technology-Nagpur.during 11-05-2020 to 15-05-2020.
9. ATAL Academy Online FDP on "Virtual Reality: Concepts and Applications" at Indian Institute Technology-Patna during 25-05- 2020 to 29-05-2020
10. FDP on "Artificial Intelligence" organized by CBIT during 22-05- 2020 to 25-05-2020.
11. FDP on "Outcome Based Education and NBA Accreditation Process (UG) " organized by CBIT during 28-05-2020 to 01-06- 2020.
12. ATAL Academy Online FDP on "Artificial Intelligence" at NIT-

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings (**Attended and/or Organized**).

Warangal from 08-06-2020 to 12-06-2020 .

13. National level online Boot camp "Career Building with Python "organized by Codegnan IT Solutions OPC PVT.LTD during 01- 06-2020 to 07-06-2020.
14. FDP on "Block chain & Cyber security: A unique fusion to untangle present-day Cyber security challenges" conducted by Andhra University College of Engineering (A) under ISEA Project, MEITY - Government of India from 22-06-2020 to 26-06-2020.
15. Attended one week Faculty Development program on "Avenues for Technology & Research in IoT" organized by Dept. of IT, MGIT in association with SWECHA during 11-12-2017 to 16-12- 2017.
16. Attended a one week National Level FDP on "Emerging Trends and Challenges in Big Data & Cloud Computing (ETICBDCC- 2017), organized by Dept. CSE, CBIT during 20-02-2017 to 25- 02-2017.
17. Organized TEQIP-II sponsored Two day National workshop on "Internet of things using Raspberry Pi3" a hand- on training during 06-03-2017 and 07-03-2017

#### Details of Journal Publications/ Conferences (**National and International**)

##### **International Journal**

1. K.Sugamya ,Shashipriyatham , Vignan," Finger Print Authenticator" , in SSRN Electronic Journal ,2022-4 DOI: 10.2139/ssrn.4030298, ISSN: 1556-5068
2. Sugamya,Srinikitha,Spandana, "A Dynamic Density Based Traffic Control System Using IoT , in SSRN Electronic Journal , 2021, DOI: 10.2139/ssrn.3883885 Part of ISSN: 1556-5068
3. Katta Sugamya , Suresh Pabboju ,Krishna. "RETRIEVING THE TEXT DATA FROM MEMOS USING OCR International Journal of Engineering and Techniques 2021-06 | Journal article Part of ISSN: 2395-1303
4. Katta Sugamya, Pabboju Suresh, Sneha V, "Image Retrieval using Hybrid Order Dither Block Truncation Code" International Journal for Research in Applied Science & Engineering Technology (IJRASET) 2021-06 | Journal article Part of ISSN: 2321-9653
5. Katta Sugamya, Pabboju Suresh , Swapnika , "Medical Image Security based on Reversible Data Hiding" GIS SCIENCE JOURNAL 2021-06 | Journal article Part of ISSN: 1869-9391
6. Katta Sugamya, Pabboju Suresh, A Vinaya Babu published a paper on "CBIR using SIFT& FDCT with Relevance Feedback Mechanism" Scopus indexed International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-11,pp 1103-1108, September 2019. DOI:10.35940/ijitee.J1193.0981119 ISSN: 22783075
7. Katta Sugamya , Suresh Pabboju, A Vinaya babu published a paper on "A Comparative Analogy of CBIR Using Spatial and Spectral Domains" in Scopus indexed Journal of Advanced Research in Dynamical and Control Systems, 8-special issue-2018 PP.452-458, ISSN 1943-023X.
8. Katta Sugamya, Pabboju Suresh, A Vinaya Babu, published a paper on "A Dynamic Web based color Image Encryption using Latin Square Image cipher" in Scopus indexed International conference on Trends in Engineering, Management, Pharmacy Sciences (ICTEMPS-2018) held at GCET in association with MSDC on April 2018,International Journal of Engineering & Technology,7 (3.3) (2018) 174-180.
9. Katta Sugamya, Pabboju Suresh, A Vinaya Babu, Anudeep, published on "SNAP and SPLIT: An ANDROID Application for Bill Payment Using TESSERACT OCR " in Scopus indexed conference on International Conference on Recent Trends in Engineering and Sciences-2018(ICRTES-2018) organized by Confer Professional Group of Conferences ,Andhra Pradesh , India during 20 th -21 st February 2018. International Journal of Engineering & Technology, 7 (4.5) (2018) 634-640.
10. Sneha reddy,Tanishka.V and Katta Sugamya, "Handwritten Digit Recognition Using Multilayer Neural Network" in International Journal of Computer & Mathematical Sciences IJCMS, ISSN 2347 – 8527Volume 7, Issue 3, March 2018. The Institution of Engineers India (IEI), Visvesvaraya Bhavan, Hyderabad, Telangana, India on 18th March 2018, published in ISBN: 978-93-87433-16-8
11. Katta Sugamya , Suresh Pabboju, A Vinaya babu "A Content Based Image Retrieval using Relevance Feedback" in International Journal of Computer & Mathematical Sciences ,IJCMS ISSN 2347 – 8527, Volume 6, Issue 11, November 2017.