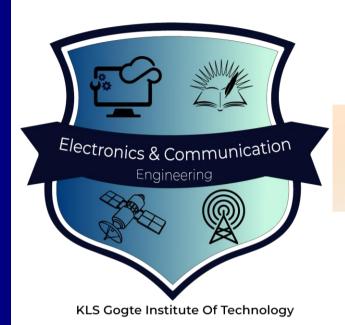


KARNATAK LAW SOCIETY'S GOGTE INSTITUTE OF TECHNOLOGY





ELECTRONICS AND
COMMUNICATION ENGINEERING
DEPARTMENT NEWSLETTER

TRON JANUARY - FEBRUARY 2021



Dr. Dattaprasad Torse



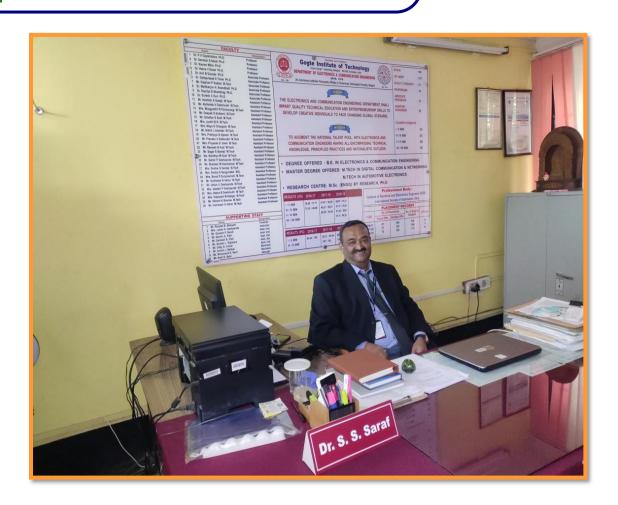
Prof. Abhishek Deshmukh



Prashant Patil

HOD: Dr. Santosh S. Saraf

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It is my pleasure to present to you GIT EC Newsletter TRON (January February, 2021 edition). This edition highlights the achievements and contributions of the department faculties and students in various academic and co-curricular fields. The department has successfully navigated the online teachinglearning scenario. The results of the process would be validated in the off-line exam results !!!. I welcome the lateral entry students to the department. This is one batch who have started their classes with the exam dates published!!!. The faculties have successfully transferred knowledge to students. Of course, with offline classes the students may lose the flexibility of moving around as in online classes, we are sure the offline mode would bring out better interaction with faculty and classmates and we are ready to take on academics, competitions in co-curricular and extra-curricular activities. I am looking forward for more contributions from students in the next edition.

02 | PUBLICATIONS

• Dr. Anil B. Gavade, Faculty, KLS-GIT ECE department, published his research work titled 'A hybrid optimization-based deep belief neural network for the classification of vegetation area in multi-spectral satellite image' in SCOPUS indexed Q3 level Journal. The article was published on 18th January 2021 in the International Journal of Knowledge-based and Intelligent Engineering Systems, pp. 363-379. DOI 10.3233/KES-170376.

International Journal of Knowledge-based and Intelligent Engineering Systems 24 (2020) 363–379
DOI 10.3233/KES-170376
IOS Press

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A hybrid optimization-based deep belief neural network for the classification of vegetation area in multi-spectral satellite image

Anil B. Gavade* and Vijay S. Rajpurohit

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Abstract. Over the last few decades, multiple advances have been done for the classification of vegetation area through land cover, and land use. However, classification problem is one of the most complicated and contradicting problems that has received considerable attention. Therefore, to tackle this problem, this paper proposes a new Firefly-Harmony search based Deep Belief Neural Network method (FHS-DBN) for the classification of land cover, and land use. The segmentation process is done using Bayesian Fuzzy Clustering, and the feature matrix is developed. The feature matrix is given to the proposed FHS-DBN method that distinguishes the land coverfrom the land use in the multispectral satellite images, for analyzing the vegetation area. The proposed FHS-DBN method is designed by training the DBN using the FHS algorithm, which is developed by the combination of Firefly Algorithm (FA) and Harmony Search (HS) algorithm. The performance of the FHS-DBN model is evaluated using three metrics, such as Accuracy, True Positive Rate (TPR), and False Positive Rate (FPR). From the experimental analysis, it is concluded that the proposed FHS-DBN model achieves ahigh classification accuracy of 0.9381, 0.9488, 0.9497, and 0.9477 usingIndian Pine, Salinas scene, Pavia Centre and university, and Pavia University scene dataset.

Keywords: Classification, multi-spectral satellite image, firefly algorithm, harmony Search algorithm, DBN, vegetation index

02 PUBLICATIONS

- Dr. Dattaprasad A. Torse, Faculty, KLS-GIT ECE department, presented his research paper on 'Classification of Epileptic Seizures using Ensemble Empirical Mode Decomposition and Least Squares Support Vector Machine' in International Conference on Computer Communication and Informatics (ICCCI) at Sri Shakthi Institute Of Engineering & Technology, Coimbatore, India, in between 27th to 29th January 2021. The conference was conducted in online mode.
- Dr. Anil B. Gavade, Faculty, KLS-GIT ECE department, presented his research paper on 'Lesion Detection and Classification, using Sematic Deep Segmentation Network' in the 4th International Conference on Smart Technologies in Data Science and Communication. The paper was presented online on 19th February 2021.



03 | WEBINARS & EVENTS

- Dr. Veena Desai, Faculty, KLS-GIT ECE department, had conducted a webinar on 'Evolutionary Computation' as a part of *IEEE outreach program* on 6th February 2021. The online event was conducted at **The Bangalore School**.
- Dr. Dattaprasad A. Torse, Faculty, KLS-GIT ECE department, successfully organized an ATAL Sponsored One Week 'Online Faculty Development Program' at KLS GIT in between 11th to 15th January 2021.



03 WEBINARS & EVENTS

• Dr. Dattaprasad A. Torse from Department of E & C Engineering received a funding of Rs. 93,000/- from AICTE Training and Learning (ATAL) academy to organize a 5-day FDP on "Green Technology & Sustainability Engineering" from 11th to 15th January 2021 using online mode. 154 participants from various colleges and industries attended the online FDP.



03 WEBINARS & EVENTS

 Prof. Sneha Nargundkar, Faculty, KLS-GIT ECE department, successfully completed an AICTE Sponsored Two Week online FDP on 'Machine Learning Techniques for Imaging and Healthcare with Python' in the duration 28th January to 12th February 2021.



 Prof. Gajanan Kadam, Faculty, KLS-GIT ECE department, had arranged a webinar on 15th February 2021 by External Experts on 'Skill Enhancement for Improving Campus Placements'. Resource persons in that event were Mr. G. Raj Narayan, Managing Director RADEL and Dr. Mahesh Annagodumath - HR Head and Admin, RADEL.





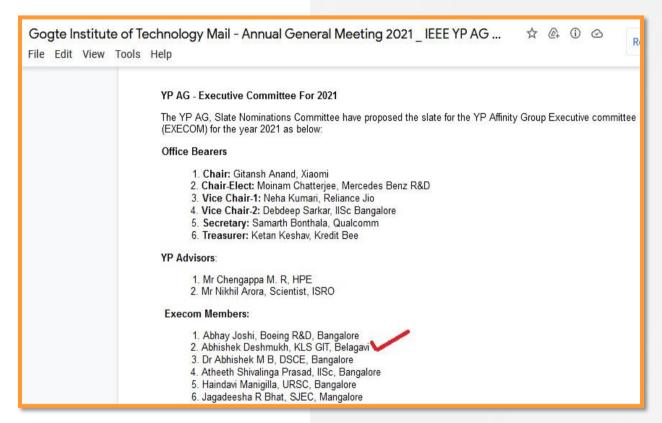
• KLS-GIT EC M-Tech DCN student Ms. Tejaswini Kalyani and her M-Tech project guide Dr. Saurav Mitra, from ECE Department have presented their research paper titled 'Sensor Selection for Optimal Information Utility' in an International Conference (online mode) - Interdisciplinary Research in Technology and Management (IRTM 2021). The conference was held in the duration 26th to 28th February 2021. Dr. Saurav won the 'Best presenter' award in that conference in the Technical Session No 2.



• Prof. Abhishek Deshmukh, Faculty, KLS-GIT ECE department, and Branch Counsellor of IEEE Student Branch of GIT had attended the Annual General Meeting of IEEE Bangalore Section 2020 at Bangalore on 10th January 2021. Prof. Abhishek received the 'Outstanding Student Branch Website Award' for the Year 2020 on behalf of the IEEE Student Branch of GIT for the excellent design of the website which highlights all the activities of the branch in a very meticulous fashion. Their work was highly appreciated in the IEEE AGM in Bangalore.



Prof. Abhishek Deshmukh, Faculty ECE Department KLS-GIT, has been inducted into the Executive Body of the YP Affinity Group for the year 2021. He was a part of the Executive Body in the year 2020. The announcement was made in the IEEE Annual General Meeting of YP Affinity Group of IEEE Bangalore Section on 10th January 2021, at Bangalore.



 Dr. Saurav Mitra, Faculty, ECE Department of KLS-GIT, had delivered a talk on 15th January 2021, for ECE M-Tech students, on 'How to prepare research papers and get it published'.

• Dr. Saurav Mitra, Faculty ECE Department KLS-GIT, has completed 2 weeks online training program on 'Entrepreneurship Development' in between 1st February to 13th February 2021. The Teachers' Training Program was organized by NITTTR, Bhopal. The training was jointly sponsored and arranged by GOI, DST and NSTEDB.



05 ACHIEVEMENTS BY STUDENTS

- Sameer A. Attar, a 3rd year ECE student of KLS GIT, ranked 3rd in the **District Level Quiz Competition** on the topic "Elections in India and General Knowledge". Sameer has thus qualified for the state level competition. He was awarded with a Certificate, a book 'SPARDHA' Karnataka Itihas, and a trophy at Zilla Panchayat Office, Belagavi on Voters day 25 January 2021. The event at Zilla Panchayat Office took place in presence of **Mr. M. G. Hiremath** who is the D. C. of Belagavi District
- Mr. Prashant Y. Patil, a 2nd year ECE student of KLS GIT has won National level Karate and Kung Fu Championship at Telangana on 14th February 2021. The event was organized by the New Dragon Fighters Martial Arts Association, Telangana.



05 ACHIEVEMENTS BY STUDENTS

Achievements of Mr. Prashant Y. Patil







06 GIT - EC IN THE NEWS

Sakal – Dated: 26/1/2021



Prajavani – Dated: 24/02/2021



ವಿದ್ಯಾರ್ಥಿ ಪ್ರಶಾಂತ ಪಾಟೀಲ ಚಿನ್ನ

Samyukta Karnataka – Dated: 24/02/2021



ಹೈದರಾಬಾದ್ ನ ನ್ಯೂ ಡ್ರ್ಯಾಗನ್ ಫೈಟರ್ಸ್ / ಮಾರ್ಷಲ್ ಅರ್ಚ್ಸ್ ಅನೋಹಿಯೇಶನ್ ಆಯೋಜಿಸಿದ್ದ 9ನೇ ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ಓಪನ್ ಕುಂಗ್-ಫೂ ಮತ್ತು ಕರಾಟಿ ಜಾಂಪಿಯನ್ ಶಿಪ್ ನಜ್ಞ ಕೆಎಲ್ಎಸ್ ಜಐಣಯ 3ನೇ ಸೆಮಿಸ್ಟರ್ ಇಹಿಸಿಯ ವಿದ್ಯಾರ್ಥಿ ಪ್ರಶಾಂತ ಪಾಣೀಲ ಚಿನ್ನದ ಪದಕ ಗೆದ್ದಿದ್ದಾರೆ. ಕೆಎಲ್ಎಸ್ ಜಐಣಯ ಅಡಆತ ಮಂಡಆಯ ಅಧ್ಯಕ್ಷರಾದ ಎಂ ಆರ್ ಕುಲಕರ್ಣಿ, ಪ್ರಾಂಶುಪಾಲರಾದ ಡಾ.ಜಯಂತ್ ಕಿತ್ತೂರ, ಡೀನ್ ಪ್ರೊ. ಸತೀಶ್ ದೇಶಪಾಂಡೆ, ಜಮ್ಯಾನಾದ ಅಧ್ಯಕ್ಷ ಪ್ರೊ. ರಮೇಶ್ ಮೇದಾರ, ನಿರ್ದೇಶಕರಾದ ಡಾ. ಪಿ.ವಿ. ಕಡಗದಕೈ ಬಹುಮಾನ ವಿಜೇತರನ್ನು ಅಭಿನಂದಿಸಿದ್ದಾರೆ.

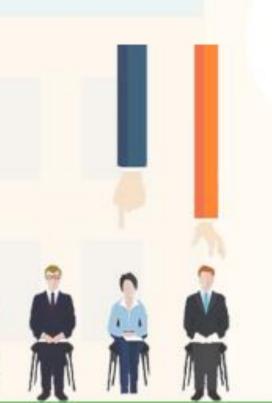
ಕ್ಯಾಂತಿ ಕುರಣಕರ ಅಭಿನಂದಿಸಿದ್ದಾರೆ.





PLACEMENTS OFFERS SECURED BY EC STUDENTS (JAN-FEB 2021)







07 CAMPUS PLACEMENT OFFERS

• Bharat Rathod got placed in Neeyamo Works on 18th January 2021. He is offered an initial pay package of **3 Lakhs** per annum.



 Akshay S Yadur got placed in Mistral Solutions on 12th February 2021. He is offered an initial pay package of 5.1 Lakhs per annum.



GIT – EC NEWSLETTER COMMITTEE

FACULTY IN-CHARGE



Dr. Saurav Mitra



Prof. Abhishek Deshmukh



Prof. Ramesh Koti

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Tech Lead/Management



Shikha Shetgeri

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