



Dr. Dayal Kumar Behera, Ph.D.

Name : Dayal Kumar Behera

Designation : Asst. Professor

Department : Department of Computer Science and Engineering
(JOINED THE INSTITUTE IN 2020)

Contact : +919853334495 (M)

Email : dayal.behera@silicon.ac.in, dayalbehera@gmail.com

RESEARCH INTERESTS

- ✓ Machine Learning
- ✓ Data Science
- ✓ Artificial Intelligence
- ✓ Internet of Things
- ✓ Remote Sensing

Academic Qualifications

Ph. D. (CSE), School of Computer Engineering, KIIT Deemed to be University, India

M. Tech. (CSE), Biju Patnaik University of Technology, India

B. E. (IT), Berhampur University, India (First Class with Honours)

Teaching Experience/Industrial Experience/Research Experience

- ✓ Worked as Assistant Professor in the Dept. of Computer Science and Engineering, Trident Academy of Technology, Bhubaneswar.
- ✓ Worked as Project Trainee in Galaxie Software Solutions, Hyderabad, India
- ✓ Worked as Lecturer in the Dept. of Computer Science and Engineering, National Institute of Science and Technology, Berhampur.

PUBLICATIONS

JOURNAL

1. **D. K. Behera**, M. Das, S. Swetanisha, J. Nayak: "XGBoost Regression model Based Electricity Tariff Plan Recommendation in Smart Grid Environment",

International Journal of Innovative Computing and Applications, Inderscience. (In Press)(Scopus)

2. S. Swetanisha, A. R. Panda, **D. K. Behera**: "Land use/land cover classification using machine learning models" International Journal of Electrical and Computer Engineering, Vol. 12, No. 2, 2022. (Scopus)
3. M. Panigrahi, **D. K. Behera**, K. C. Patra: "Epileptic Seizure Classification of EEG Signals using Extreme Gradient Boosting Classifier", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 25, No. 2, 2022 (Scopus).
4. **D. K. Behera**, M. Das, S. Swetanisha, J. Nayak, S. Vimal, B. Naik: "Follower Link Prediction using the XGBoost Classification Model with Multiple Graph Features", Journal of Wireless Personal Communication, Springer, 2021. (SCIE)
5. S. Dash., M.N, Das, **D. K. Behera**: "An Improved Dual Steganography Hybrid Model Using Modified QVD and Difference Expansion Technique", International journal of Intelligent Engineering and Systems, Vol. 14, Issue 2, 2021. (Scopus)
6. S. Dash., M. N, Das, **D. K. Behera**, Adaptive difference expansion image steganography for increasing capacity, ICIC Express Letter, Vol. 15, Number 8, 2021. (Scopus)
7. **D. K. Behera**, M. Das, S. Swetanisha, P. K. Sethy: "Hybrid model for movie recommendation system using content K-nearest neighbors and restricted boltzmann machine" Indonesian Journal of Electrical Engineering and Computer Science, Vol. 23, No. 1, July 2021, pp. 445~452. (Scopus)
8. **D. K. Behera**, M. Das, S. Dash, S. Swetanisha: "Weighted Hybrid Model for Product Recommender System using RBM and Matrix Factorization", International Journal of Advanced Science and Technology, Vol. 29, Issue 4, pp. 4485-4493, 2020.
9. M. Panigrahi, **D. K. Behera**, K. C. Patra: "Classification of EEG Recording in an Epileptic Patient Using DWT and Extreme Gradient Boosting Classifier", International Journal of Advanced Science and Technology, Vol. 29, Issue 5, pp. 4163 - 4180, 2020
10. Shreela Dash, Madhabananda Das, **D. K Behera**, "High Capacity Multi-level Image Steganography Model Using KNN Classifier", IJAST, vol. 29, no. 3, pp. 11692 - 11708, Mar. 2020.
11. **D. K. Behera**, M. Das, S. Swetanisha: "A Research on Collaborative Filtering Based Movie Recommendations: From Neighborhood to Deep Learning Based System", International Journal of Recent Technology and Engineering, Vol. 8, Issue 4, pp. 10809-10814, 2019
12. A. K. Samal, **D. K. Behera**, S.Swetanisha, J. Pramanik, S. K. Pani: "Opinion Mining – A Birds Eye View of Issues and Challenges", International Journal for Scientific Research & Development, Vol. 4, Issue 01, 2016
13. A. K. Samal, **D. K. Behera**, S.Swetanisha, J. Pramanik, S. K. Pani: "Sentiment Analysis through Mining Unstructured Reviews - Issues and Challenges",

CONFERENCES

1. M. Panigrahi, **D.K. Behera**, K.C. Patra: "A Hybrid Model for Epileptic Seizure Classification Using Wavelet Packet Decomposition and SVM", In Advances in Intelligent Computing and Communication, pp. 211-219, vol 202. Springer, Singapore. (2021) (Scopus)
2. **D. K. Behera**, M. Das, S. Swetanisha: "Predicting Users' Preferences for Movie Recommender System Using Restricted Boltzmann Machine", in Proceedings of the International Conference on Computational Intelligence in Data Mining, 2018, pp. 759-769. Part of the book series on Advances in Intelligent Systems and Computing, vol 711, chapter 67. Springer, Singapore. (2019) (Scopus)
3. **D. K. Behera**, M. Das, S. Swetanisha, B. Naik : "Collaborative Filtering Using Restricted Boltzmann Machine and Fuzzy C-means", in Proceedings of the International Conference on Progress in Computing, Analytics and Networking, 2018, pp 723-731. Part of the book series on Advances in Intelligent Systems and Computing, vol 710, chapter 69, Springer, Singapore. (2018) (Scopus)
4. **D. K. Behera**, P. K. Patra: "Clustering Based on Fuzzy Rule-Based Classifier" in Proceedings of the International Conference on Computational Intelligence in Data Mining, 2014, pp 233-242. Part of the book series on Smart Innovation, Systems and Technologies, vol 31, chapter 67. Springer. (2015) (Scopus)
5. B. Naik, S. Swetanisha, **D. K. Behera**, S. Mahapatra, B. K. Padhi: "Cooperative Swarm Based Clustering Algorithm based on PSO and K-means to find optimal cluster centroids", in Proceedings of the National Conference on Computing and Communication Systems (NCCCS), IEEE, 2012. (Scopus)

ANY OTHER

FUNDED PROJECT

1. Title: An Intelligent IoT based System for Sensing Hazardous Gases in Manhole and Analysis
Sponsored by: Device Development Programme (DDP)-Department of Science and Technology (DST)-Government of India
Period: From July 2020
Project Cost: Rs. 19 Lakhs
Principal Investigator: Dr. Sakuntala Mohapatra, TAT, Bhubaneswar
Co-Principal Investigator:
 - Shaik Mohammed Ali
 - Shubhendra Kumar Tripathy
 - Dayal Kumar Behera

FUNDED PROJECT GUIDED

1. Title: Collision Avoidance Self-Flying Drone
Sponsored by: DST, New Delhi under IEDC Scheme
Period: July 2017 to June 2018
Project Cost: Rs. 1 Lakh
Student Members: Sonu Kumar, Banita Jaipuria, Ved Prakash Suman
Guide: Dayal Kumar Behera
2. Title: Recommender Portal using Big Data Analytics
Sponsored by: DST, New Delhi under IEDC Scheme
Period: July 2014 to June 2015
Project Cost: Rs. 1 Lakh
Student Members: Ayes Chinmay, Diksha gupta, Saurabh Chandra
Guide: Dayal Kumar Behera

TECHNICAL TALK

1. Presented on the topics "Data Preprocessing using Python" and "Python Essentials for Machine Learning" in the AICTE Sponsored FDP on "Role of Data Science in IoT Application Domain", at Trident Academy of Technology, Bhubaneswar.
2. Presented on the topic "GIS on Cloud", in the workshop Spatial Data Infrastructure-ODISHA organized by ORSAC & DST, India.
3. Presented 30 hours technical talk on "Enterprise Application Development using Java" in the internal FDP at Trident Academy of Technology, Bhubaneswar.

ACHIEVEMENTS

1. Qualified candidate of GATE 2006, 2007 with AIR 485 and 530 in IT and GATE 2010, 2012 in CSE & IT with score 392 and 496, respectively.
2. Certified Trainer for the role of "Telecom Terminal Equipment Application Developer (Android) QP No: TEL/Q2300" by TSSC, India.
3. SUN Certified JAVA Programmer for the JAVA 2 Platform 1.5 (SCJP 5.0) candidate ID-SR3086566.
4. Worked as an Organizer and Reviewer for the International Conference on Computational Intelligence in Data Mining (ICCIDM), 2014, VSSUT, Burla, Odisha.
5. Worked as a faculty coordinator and taken classes of Data Science Club at Trident Academy of Technology, Bhubaneswar.

6. Completed CISCO Instructor Training and taught Introduction to IoT, Essentials of Python Programming, NDG Linux Essentials Courses at CISCO Networking Support Center.
7. Participated in Smart India Hackathon, 2017 as a Mentor of team "Triton-Xplora" on the problem statement "Pradhan Mantri Kaushal Vikash Yojna(PMKVY) Employers App".
8. Participated in CISCO IoT Hackathon 2017 as a Mentor. Team under my guidance grabbed Winner position.
9. Participated in Programming Hackathon "Trithon 2019" as a Mentor. Team under my guidance grabbed Runners up position.