



Nayan Ranjan Paul, Ph.D.

Designation : Assistant Professor

Department : Department of Computer Science and Engineering
(JOINED THE INSTITUTE IN YEAR 2022)

Contact : +919937464160(M), +917008857080(M)

Email : nayan.paul@silicon.ac.in

RESEARCH INTERESTS

Natural Language Processing:

- ✓ Application of machine learning in crisis situations.
- ✓ Analyzes social media communications during time-critical situations using techniques such as data mining, machine learning, and deep neural networks.
- ✓ Information retrieval from social media posts
- ✓ Sarcasm detection using deep learning
- ✓ Sentiment analysis
- ✓ Machine translation

Academic Qualifications

Ph. D. (CSE.), IIT Bhubaneswar, India

M. Tech. (CSE), IIT Bhubaneswar, India

Teaching Experience/Industrial Experience/Research Experience

- ✓ Teaching Experience: 15 years
- ✓ Research Experience: 3 years

PUBLICATIONS

JOURNAL ARTICLES & CONFERENCE PAPERS

- [1]. **Nayan Ranjan Paul**, Rakesh Chandra Balabantaray & Deepak Sahoo, Fine-Tuning Transformer-Based Representations in Active Learning for Labelling

- Crisis Dataset of Tweets. SN COMPUT. SCI. 4, 553 (2023). <https://doi.org/10.1007/s42979-023-02061-z>
- [2]. Rakesh Chandra Balabantaray, **Nayan Ranjan Paul**, "Mihir Raj, Hindi-Odia Machine Translation System", in: K. Ghosh, T. Mandl, P. Majumder, M. Mitra (Eds.), Working Notes of FIRE 2023 - Forum for Information Retrieval Evaluation, Goa, India. December 15-18, 2023, CEUR Workshop Proceedings, CEUR-WS.org, 2023.
- [3]. D. Sahoo, S. C. Nayak, **Nayan Ranjan Paul**, S. Saha, P. R. Patra and P. Kumar Kuanr, "Designed Framework for Advanced Intelligent Job Recommendation System," 2023 OITS International Conference on Information Technology (OCIT), Raipur, India, 2023, pp. 880-885, doi: 10.1109/OCIT59427.2023.10430867.
- [4]. **Nayan Ranjan Paul**, Deepak Sahoo, Rakesh Chandra Balabantaray, "Classification of crisis-related data on Twitter using a deeplearningbasedframework", Multimedia Tools and Applications (2022), DOI : 10.1007/s11042-022-12183-w.
- [5]. **Nayan Ranjan Paul**, D. Sahoo and R. Chandra Balabantaray, "VocabGCN-BERT: A Hybrid Model to Classify Disaster Related Tweets," 2022 OITS International Conference on Information Technology (OCIT), Bhubaneswar, India, 2022, pp. 55-60, doi: 10.1109/OCIT56763.2022.00021.
- [6]. Deepak Sahoo, **Nayan Ranjan Paul**, Rakesh Chandra Balabantaray, Asif Uddin Khan, "SarcasmDetectionUsing Deep Learning," 2021 19th OITS International Conference on Information Technology (OCIT), 2021, pp. 331-335, DOI:10.1109/OCIT53463.2021.00072.
- [7]. **Nayan Ranjan Paul**, M. Sahoo, S. K. Hati and T. Sahoo, "DetectingDisasterRelated Tweets UsingHybrid Deep Neural Network Models," 2021 International Conference on Advances in Technology, Management & Education (ICATME), 2021, pp. 71-76, DOI: :10.1109/ICATME50232.2021.9732732.
- [8]. **Nayan Ranjan Paul**, Rakesh Chandra Balabantaray, "Detecting Crisis Event on Twitter Using Combination of LSTM, CNN Model", In Annual Convention of the Computer Society of India, pp. 71-80, Springer, Singapore, 2020.
- [9]. Ashok Kumar Das, **Nayan Ranjan Paul**, LaxminathTripathy, "Cryptanalysis and Improvement of an Access Control in User HierarchyBased on EllipticCurveCryptosystem" in Information Science (Elsevier), 2012, DOI : 10.1016/j.ins.2012.04.036.
- [10]. **Nayan Ranjan Paul**, LaxminathTripathy and Pradipta Kumar Mishra, "Analysis and Improvement of DSDV Protocol", International Journal of Computer Science Issues (IJCSI), Vol. 8. No. 5, September 2011.
- [11]. LaxminathTripathy and **Nayan Ranjan Paul**, "An Efficient and Secure key Management Scheme for Hierarchical Access Control Based on ECC", International Journal for Communication Network and Security, Vol. 1, No. 2, 2011.

ANY OTHER
Certification Courses

- ✓ Cleared UGC NET held on June, 2015 in the subject Computer Science and Application.
- 1. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Affective Computing**".
- 2. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Data Analytics with Python**".
- 3. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Deep Learning**".
- 4. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Introduction to Machine Learning**".
- 5. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Practical Machine Learning withTensorflow**".
- 6. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)**online certification course on "**Python for Data Science**".
- 7. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Programming, Data Structures and Algorithms Using Python**".
- 8. Completed National Programme on TechnologyEnhanced Learning **(NPTEL)** online certification course on "**Joy of Computing Using Python**".
- 9. Completed online certification course offered by IITBombayX, an online learning initiative of the Indian Institute of Technology Bombay on "**LaTeX for Students, Engineers, and Scientists**".
- 10. Completed "**Transfer Learning for NLP withTensorFlow Hub**" an online course authorized by Coursera Project Network and offeredthrough Coursera.
- 11. Completed "**Fine Tune BERT for Text Classification withTensorFlow**" an online course authorized by Coursera Project Network and offeredthrough Coursera.

Conferences attended

- 1. Forum for Information Retrieval Evaluation, FIRE, 2023
- 2. OITS International Conference on Information Technology (OCIT), 2023
- 3. OITS International Conference on Information Technology (OCIT), 2022
- 4. OITS International Conference on Information Technology (OCIT), 2021
- 5. International Conference on Advances in Technology, Management & Education (ICATME), 2021
- 6. 53rd CSI-2020 Annual Convention of Computer Society of India