

Name: Dr. Dhruva Jyoti Kalita
Designation: Assistant Professor
Branch: Computer Science & Engineering



Educational Qualification(s):

Qualification(s)	University
B.E. (Computer Science & Engineering)	Visvesvaraya Technological University (VTU), Belgaum
M.Tech, (Computer Technology & Applications)	National Institute of Technical Teachers' Training and Research (NITTTR), Bhopal
Ph.D (Computer Science & Engineering)	National Institute of Technology (NIT), Jamshedpur

Other Qualifications:

- GATE-2014 Qualified with GATE.
- Diploma in .NET Technologies from NIIT (2011)

Experience in years:

Academic:

- Worked as Assistant Professor (CSE) under **NPIU (National Project Implementation Unit, TEQIP-III)** at Gaya College of Engineering, Gaya **(6 years)**
- Worked as Assistant Professor (CSE) at Indus International University (IIU), VPO ,Bathu, Tehsil Haroli, District-Una **(6 Months)**
- Worked as Assistant Professor (CSE) at Dr. K.N. Modi University, Newai, Rajasthan **(1 Year 2 Months)**
- Worked as a Faculty Member at Asian InfoTech Computer Education (DOEACC 'O' & 'A' Level Accr. Center, Govt. of India, AICTE Approved), Guwahati **(1 Year)**

- Worked as a Technical Trainer in a program sponsored by Welfare of Plain Tribes (Govt. of Assam), Guwahati (1 Year)

Industrial:

- Worked for Nokia Siemens. (1.2 years)

Patents and Projects:

- Published one Patent on “**Method for Designing Dynamic Frame Work for Tuning SVM Hyper Parameters based on Moth-Flame Optimization and Knowledge-Based-Search.**” [Application Number: 202031014705]
- Worked on a project under **Collaborative Research Scheme (CRS)** named “**Content-Based Image Retrieval System Assisted by Mammogram Classification for the Diagnosis of Breast Cancer**” funded by AICTE as **Principal Investigator (PI)** [Sanction Amount: Rs. 7,30,000].

Publications:

- **Dhruba Jyoti Kalita**, Vibhav Prakash Singh, and Vinay Kumar. "A Dynamic Framework for Tuning SVM Hyper Parameters based on Moth-Flame Optimization and Knowledge-Based-Search." *Expert Systems with Applications* (2020): 114139. [SCIE, Impact factor: 8.665]
- **Dhruba Jyoti Kalita**, Vibhav Prakash Singh, and Vinay Kumar. "A Novel Adaptive Optimization Framework for SVM hyper-parameters tuning in non-stationary environment: A Case Study on Intrusion Detection System" *Expert Systems with Applications* (2020): 114139. [SCIE, Impact factor: 8.665]
- **Dhruba Jyoti Kalita**, Vibhav Prakash Singh and Vinay Kumar. Two-way threshold-based intelligent water drops feature selection algorithm for accurate detection of breast cancer. *Soft Computing*, 1-29. [SCIE, Impact factor: 3.643]
- **Dhruba Jyoti Kalita** and Shailendra Singh. "SVM Hyper-parameters optimization using quantized multi-PSO in dynamic environment." *Soft Computing* 24.2 (2020): 1225-1241. [SCIE, Impact factor: 3.643]

- **Dhruba Jyoti Kalita**, Vibhav Prakash SinghandVinay Kumar. "A Lightweight Knowledge-Based PSO for SVM Hyper-Parameters Tuning in a Dynamic Environment."*The Journal of Supercomputing* (2023): 1-23 [SCIE, Impact factor: 2.557]
- **Dhruba Jyoti Kalita**, Vibhav Prakash SinghandVinay Kumar (2021). "Detection of Breast Cancer Through Mammogram Using Wavelet-Based LBP Features and IWD Feature Selection Technique". *SN Computer Science* (2022), Springer[Scopus]
- **Dhruba Jyoti Kalita**, Vibhav Prakash Singh, and Vinay Kumar. "SVM Hyper-Parameters Optimization using Multi-PSO for Intrusion Detection." *Social Networking and Computational Intelligence*. Springer, Singapore, 2020. 227-241. (Scopus)
- **Dhruba Jyoti Kalita**, Vibhav Prakash Singh, and Vinay Kumar. "A Survey on SVM Hyper-Parameters Optimization Techniques." *Social Networking and Computational Intelligence*. Springer, Singapore, 2020. 243-256. (Scopus)
- Abhishek Kumar, **Dhruba Jyoti Kalita**, and Vibhav Prakash Singh. "A Modern Pothole Detection technique using Deep Learning." 2nd International Conference on Data, Engineering and Applications (IDEA). IEEE, 2020. (IEEE)
- Vibhav Prakash Singh, **Dhruba Jyoti Kalita**, and Shashank Tripathi. "Classifying Gene Expression Data of Cancer Using Multistage Ensemble of Neural Networks." *Available at SSRN 3349578* (2019).
- Chakrapani, Sumit Raj, Vibhav Prakash Singh and **Dhruba Jyoti Kalita**. "Detection of Chronic Kidney Disease Using Artificial Neural Network", International Conference – ICRAMSTEL(2019)
- Surendra Kumar Dr Harsh Kumar, and **Dhruba Jyoti Kalita**. "Sentiment Analysis in Today's Trend: A Review." *International Journal of Engineering and Computer Science* 6.4 (2017).
- Chakrapani, Abhishek, Vibhav Prakash Singh and **Dhruba Jyoti Kalita**. "Chronic Kidney Disease Detection using Random Forests and Eigenvectors Based Feature Selection", International Conference- AISCC- 2020 (Springer)

Certificates:

- “Core Teaching Skills for PG Students” at National Institute of Technical Teachers’ Training and Research, Bhopal (Ministry of Human Resources, Govt. of India) (2016)
- “Faculty Induction Program” at IIT, Kanpur (20/01/2018 to 24/01/2018)
- “Summer Training Program on Advanced Pedagogy & Digital Tools “at IIT, Kanpur (10/06/2019 to 14/06/2019)
- “Professional Development Training Programme for Faculty & Administrators of Project Institutions of Technical Education Quality Improvement Programme-III (TEQIP-III)” at IIM, Visakhapatnam (26/11/2020 to 28/11/2020)
- Faculty Development Program on “Research Methodology” (NPIU) at Gaya College of Engineering (07/01/2019 to 11/01/2019)
- “Outcome based Accreditation for Engineering Programs” at Gaya College of Engineering (09/03/2018 to 10/03/2018)
- “In-house Training Program of NBA Accreditation (by NITTTR, Kolkata)” at Gaya College of Engineering (19/03/2018 to 23/03/2018)
- TEQIP-III Sponsored Five Days National Workshop on “Alternate Sources of Energy – Scope & Impact” (04/02/2019 to 08/02/2019)
- “Training Program on Big Data Hadoop” at Indus International University (14/11/2017)
- “FDP on Network Security” jointly organized by Electronics & ICT Academies (20/05/2019 to 24/05/2019)
- FDP on “Antenna Trends” jointly organized by Electronics & ICT Academies (01/07/2019 to 05/07/2019)