



The Digital Nexus

Department of Computer Science and Engineering, Tezpur University



The CSE Department Newsletter

A B O U T

The Department of Computer Science and Engineering at Tezpur University is a shining example of creativity and success in a field that is always changing. Since it opened in 2006, this department has been a home for bright minds, helping them reach their full potential and turning them into leaders of the digital age.

The Department of CSE stands out because it is always on top of what the business world needs. The programs aren't just a list of classes; it's a carefully put together symphony of knowledge and skills that fits in with the global IT environment.

Step into this world of opportunities, where science and creativity meet, and let the leaders of tomorrow at Tezpur University show you the way.

To be a dedicated centre of learning and research in computer science and engineering for creating competent professionals capable of taking leading roles in industry, academia, entrepreneurship and application.

VISION

M I S S I O N

1. To create a lively environment for the students and faculty for personal and professional growth with high ethical standards.
2. To continuously upgrade the curriculum and laboratory facilities to train the students in latest technology for better employability.
3. To involve the students in individual as well as team projects for solving challenging problems in computer engineering and applications.
4. To create a centre of excellence on frontier areas of research.
5. To facilitate consultancy work by the faculty for industry and the public sectors.

Message from HoD

The Department of Computer Science was started in July, 1994 under the school of Science and Technology. It was started with the object of promoting specialized knowledge in the field of Computer Science and Computer Application. In view of the worldwide shortage of skilled manpower in the field of Information Technology, the Department strives to channelize talented youth of the region to this challenging and knowledge intensive field by imparting quality technical knowledge and skills in the field. The programs started under this department were Master of Computer Application (MCA), Master of Science (by Research) in Computer Science and PhD in Computer Science. The programs have been designed keeping in mind the needs of the global Information Technology Industry. Our distinguished faculty members ensure a wide range of diverse learning experiences ranging from the fundamentals of Computer Science, Core Courses, Programming, Emerging Technologies like Big Data Analytics, Data Mining, IoT, AI, Machine Learning, Cyber Security, Blockchain, Professional Ethics, Research Methodologies and Open-Source Technologies to name just a few.



— *Prof. Sarat Saharia*

ACTIVITIES TIMELINE

JAN 2023

JOURNAL PUBLICATIONS

- **The Visual Computer**
 - A multilevel recognition of Meitei Mayek handwritten characters using fusion of features strategy
Authors: Deena Hijam, Dr. Sarat Saharia
- **Physical Communication**
 - LSTM-enabled prediction-based channel switching scheduling for multi-channel cognitive radio networks
Authors: Prakash Chauhan, Dr. Sanjib K Dekka, Dr. Nityananda Sarma
- **Expert Systems with Applications**
 - NNVDC: A new versatile density-based clustering method using k-Nearest Neighbors
Authors: Rabinder Kumar Prasad, Dr. Rosy Sarmah, Subrata Chakraborty, Sauravjyoti Sarmah
- **Nanoelectronics: Physics, Materials and Devices**
 - Internet-of-Thing-enabled energy systems: architectures, issues, and challenges
Authors: N Hoque, Dr. Dhruba Kumar Bhattacharyya
- **International Journal of Information and Computer Security**
 - An effective ensemble method for missing data imputation
Authors: Bikash Barua, Manash Dutta, Dr. Dhruba Kumar Bhattacharyya

FEB 2023

JOURNAL PUBLICATIONS

- **Journal of Genetics**
 - Transcribed intergenic regions exhibit a lower frequency of nucleotide polymorphism than the untranscribed intergenic regions in the genomes of Escherichia coli and Salmonella ..
Authors: Pratyush Kumar Beura, Piyali Sen, Ruksana Aziz, Dr. Siddhartha Shankar Satapathy, Suvendra Kumar Ray
- **International Journal of Bioinformatics Research and Applications**
 - Prediction of essential genes using single nucleotide compositional features in genomes of bacteria: a machine learning-based analysis
Authors: Annushree Kurmi, Piyali Sen, Madhusmita Dash, Aswini Kumar Patra, Suvendra Kumar Ray, Dr. Siddhartha Sankar Satapathy
- **International Journal of Information Technology**
 - Impact of distance measures on partition-based clustering method—an empirical investigation
Authors: Rabinder Kumar Prasad, Subrata Chakraborty, Dr. Rosy Sarmah

- **Journal of Computational Mathematics and Data Science**

- JoMIC: A joint MI-based filter feature selection method
Authors: Khumukcham Robindro, Urikhimbam Bobby Clinton, Nazrul Hoque, Dr. Dhruba Kumar Bhattacharyya

CONFERENCE PUBLICATION

- **2023 5th International Conference PUBLICATION on Smart Systems and Inventive Technology (ICSSIT)**
- ParPER: A Partitioned Prioritized Experience Replay in Multi-Agent Setting of Reinforcement Learning
Authors: Tamal Sarkar, Dr. Shobhanjana Kalita

APR 2023

TOURNAMENT

- **CYBER-WEEKEND**

University-wide Tournament by the autonomous club NAVALOGY

JOURNAL PUBLICATION

- **IEEE Geoscience and Remote Sensing Letters**
- Active Learning for Hyperspectral Image Classification Using Kernel Sparse Representation Classifiers
Authors: Amos Bortiew, Dr. Swarnajyoti Patra, Lorenzo Bruzzone

CONFERENCE PUBLICATION

- **2023 International Conference PUBLICATION on Intelligent Systems, Advanced Computing and Communication (ISACC)**
- An Efficient Consensus Algorithm for Blockchain-Based Federated Learning (Accepted)
Authors: Kausthav Pratim Kalita, Dr. Debojit Boro, Dr. Dhruba Kumar Bhattacharyya

MAR 2023

JOURNAL PUBLICATION

- **The Visual Computer**
- Semantic-aware structure-preserving median morpho-filtering
Authors: Kunal Pradhan, Dr. Swarnajyoti Patra

CONFERENCE PUBLICATIONS

- **2023 International Conference PUBLICATION on Advances in Electronics, Communication, Computing and Intelligent Information Systems (ICAEICIS)**
- Pulmonary Nodule Detection in Computed Tomography Images Using Deep Learning
Authors: Akumlong Longkumer, Supongmen Walling, Dr. Shobhanjana Kalita

MAY 2023

CONFERENCE PUBLICATION

- **2023 2nd International Conference PUBLICATION on Paradigm Shifts in Communications Embedded Systems, Machine Learning and Signal Processing (PCEMS)**
- Analysing Word Stress and its effects on Assamese and Mizo using Machine Learning
Authors: Jubilee Gogoi, Dr. Sanghamitra Nath

JUN 2023

JOURNAL PUBLICATION

- **Wireless Networks**
- Single-sided truthful auction mechanism for heterogeneous channel allocation in cognitive radio networks
Authors: Monisha Devi, Dr. Nityananda Sarma, Dr. Sanjib Deka
- **Healthcare Analytics**
- A comparative assessment of most widely used machine learning classifiers for analysing and classifying autism spectrum disorder in toddlers and adolescents
Authors: Jyotismita Talukdar, Deba Kanta Gogoi, T.P Singh

- iRASA: Fog Scheduling With Congregation of MVO and PSO
Authors: Chandrima Paul, Kumarjit Ray, Dr. Nabajyoti Medhi
- A Blockchain-Assisted Authentication for SDN-IoT Network Using Smart Contract
Authors: Birglang Bargary, Dr. Nabajyoti Medhi
- Vocal Singing and Music Separation of Mizo Folk Songs
Authors: Nikhil Das, Esther Ramdinmawii, Ajit Kumar, Dr. Sanghamitra Nath

JUL & AUG 2023

CONFERENCE PUBLICATION

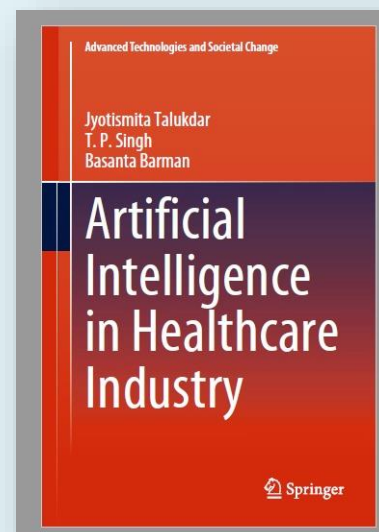
- **IEEE Globecom**
- RISP-SDN: Reputation Aware IoMT Service Provisioning Using SDN in Edge/Fog-Based Systems (Accepted)
Authors: Kumarjit Ray, Dr. Nabajyoti Medhi, Rajdeep Ghosh, Pritindra Das, Vicky Deka, Prof. Dr. Sudip Misra

CONFERENCE PUBLICATION

- **IEEE ICC 2ND Workshop on SIGNIS: Softwarized next generation networks for IOT services**
- Performances of M2M Protocols in Internet of Medical Things
Authors: Kunal Das, Tridib Lochan Dutta, Kumarjit Ray, Rajdeep Ghosh, Debangee Goswami, Aditty Dey, Prabhatangshu Phukan, Pritindra Das, Vicky Deka, Dr. Nabajyoti Medhi

BOOK PUBLICATION

- Springer Singapore
- **Artificial Intelligence in Healthcare Industry**
Author: Dr. Jyotisma Talukdar



MeitY Sponsored Two Day Workshop on
“Recent Trends in Information Technology, Networking, Communication and Healthcare”
March 2023



**Workshop on Data Science and its Applications organized by Dept. of CSE,
March 2023**

Student achievements (GATE 2023)

Candidate name	Dept. roll number	Gate total Score	Gate Percentile
Antara Singhal	CSB20071	374	34.67
Akshat Gupta	CSB20038	280	26.33
Rajdeep Ghosh	CSB18012	408	37.67
Anubhav Binit	CSB20057	521	47.67
Bhaskar Sonowal	CSB20063	243	23
Ayushman Singh	CSB20056	355	32
Dibyaroop Das	CSB19005	468	43
Pritindra Das	CSB19041	292	29.2
keshav Kumar	CSB20043	322	30
Rupam Sah	CSB19029	367	34
Ratnesh Kumar Tiwari	CSB19069	517	47.33
Vicky K Deka	CSB19026	540	49.3
Dhrubang Utpal Talukdar	CSB20049	581	53
Debangsa Saikia	CSB19009	472	43.33

Some messages by our alumni

Faculties are excellent. Also, excellent facilities.

Dhananjay Chutia, M.Tech-IT 2007

Senior Staff Software Engineer, Spirent Communications

Proud being a TU alumnus.

Arvin Dey, MCA 2007

Customer Success Manager, Cornerstone OnDemand

Editors

Faculty members:



Dr. Jyotisma Talukdar
(Asst. Prof. dept of CSE)



Dr. Tribikram Pradhan
(Asst. Prof. dept of CSE)

Student member:



Deba Kanta Gogoi

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