

# ANNUAL REPORT

2022-23



Indian Institute of Information Technology  
Guwahati

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## Director's Message

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The Institute came out of the Covid-19 pandemic by restoring physical classes from March 2022. However, JEE entrance exams were again postponed in 2022, and so, admission to the B.Tech programme got delayed, and classes for the first year started from November 9 2022, whereas they should have started in the beginning of August. Their first semester was from November to March, with the second semester from April to July. The Govt. of Assam announced in its budget in February 2022, a grant of Rs. 10 crores to the Institute. This set in motion a larger construction programme which was started in 2022-23 and which will continue in succeeding years. Rs. 10 crores were received in March 2023. On behalf of the Institute, I wish to thank the Govt. of Assam for this financial support, and we hope we will receive more support in coming years too.

# Board of Governors

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The following are the members of the Board of Governors in the year 2022-23:

1. Mr. S. Ramadorai (Chairman) – TCS
2. Prof. Shivaji Bandyopadhyay (Member till November 2022) – Director NIT Silchar
3. Prof. Rajat Gupta (Member since December 2022) – Director NIT Silchar
4. Prof. Bhabesh Chandra Goswami (Member till August 2022) – VC Cotton University
5. Prof. Ramesh Chandra Deka (Member since September 2022) – VC Cotton University
6. Prof. T.G. Sitharam (Member till December 2022) – Director, IIT Guwahati
7. Prof. Parameswar K. Iyer (Member since January 2023) – Director (Officiating), IIT Guwahati
8. Mr. Ranjit Barthakur (Special Invitee) – Govt. of Assam
9. Mr. Prasanta Borkakoty (Member) – Oil India Ltd
10. Dr. Indrajit Bhattacharya (Member) - TCS
11. Principal Secretary, Dept. of Education Govt. Of Assam
12. Mr. Subrata Ghosh – SREI
13. Ms. Manmohan Kaur (Member till March 2023) – Joint Secretary, MoE Govt. of India
14. Ms. Saumya Gupta (Member since March 2023) – Joint Secretary, MoE Govt. of India
15. Prof. T. Punniyamurthy (Member) – Dean Faculty Affairs IIT Guwahati
16. Prof. K. V. Krishna (Member) – Dean Academic Affairs, IIT Guwahati

The Board met four times during the year 2022-23, all through Online mode (23<sup>rd</sup> June 2022, 12<sup>th</sup> October 2022, 11<sup>th</sup> January 2023 and 23<sup>rd</sup> March 2023).

# Building and Works Committee

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The following are the members of the Building and Works Committee in the year 2022-23:

1. Director of the Institute, Chairman
2. Principal Secretary, Govt. of Assam, Education Dept. or his nominee
3. Prof. Arvind Kr. Singh, Professor, Dept. of Civil Engineering, IIT Guwahati, nominee of MoE, GoI
4. Mr. Kaushik Basu, AGM, IPD TCS, nominee of Industry Partner
5. Prof. Anjan Dutta, Former Dean Institute Works, IIT Guwahati - nominee of the Board
6. Mr. Gajen Ch. Das, Former S.E (PWD) and Advisor Design, Assam Police Housing Corporation
7. Dr. Ferdous Ahmed Barbhuiya, Associate Dean (R&D), IIIT Guwahati
8. Mr. Nirupam Roy, HoS (Engineering), IIT Guwahati - Special Invitee
9. Superintending Engineer/Estate Officer, IIIT Guwahati - Secretary

The BWC met for four times during the year 2022-23, all through Online mode (17<sup>th</sup> June 2022, 28<sup>th</sup> September 2022, 6<sup>th</sup> December 2022 and 17<sup>th</sup> February 2023).

# Senate

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The following are the members of the Senate in the year 2022-23:

1. Director of the Institute - Chairman of the Senate
2. All Faculty members at the level of Assistant Professors and higher.
3. Prof. Pranab Jyoti Das, Ex-Professor, Department of Chemistry and former Dean, Faculty of Science, Gauhati University.
4. Prof. Dhruba Kr. Bhattacharyya, Dean of Academic Affairs and Professor, Department of Computer Science and Engineering, Tezpur University.
5. Prof. Samarendra Dandapat, Department of Electronics and Electrical Engineering, Indian Institute of Technology Guwahati.
6. Registrar - Non Member Secretary

The Senate met four times during the year 2022-23 (6<sup>th</sup> May 2022, 22<sup>nd</sup> June 2022, 14<sup>th</sup> October 2022 and 27<sup>th</sup> February 2023).

# Academics

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## Fourth Convocation of IIIT Guwahati

The fourth convocation of the Institute was held on 13<sup>th</sup> July 2022 at the Pragjyoti Cultural Complex, Guwahati. Degrees were awarded to students who graduated in 2021 and 2022. There was no convocation in 2021 due to the Covid situation.

Dr. Himanta Biswa Sarma, Chief Minister of Assam was the Chief Guest. Unfortunately, he could not attend, and his speech was read out at the convocation. Degrees were awarded to the following number of students:

Year	B. Tech	M.Tech	PhD	Total Graduating Students
2021	75	22	5	322
2022	182	34	4	

## Award of Medals to Graduating Students

The following students were awarded the President's Medal and Chairman's Medal.

	Year	Name	Roll No.	Department	CPI
President's Medal:	2021	SUNAND SHARMA	1701068	CSE	9.65
	2022	ABHINAV SINGH	1801004	CSE	9.51
Chairman's Medal:	2021	ADITYA JOLLY	1701001	ECE	9.23
		DIVYANSHU BHARDWAJ	1701017	ECE	9.23
	2022	ANKIT KUMAR	1801021	ECE	9.10

## Academic Programmes

### B.Tech Programme

Students are admitted through the Joint Entrance Examination (JEE) conducted by NTA for Centrally Funded Technical Institutes. Reservations of seats are as per the Central Educational Institutions (Reservation in Admission) Act, 2006. B. Tech programmes in CSE and ECE were started in 2013. The sanctioned strength in 2022 was 200 (CSE: 115, ECE: 85). Twenty percent of these seats were added as supernumerary seats for girl students and 3% reservations for EWS was incorporated, without reducing the number of general category seats, resulting in an intake of 254. Admissions were delayed due to the Covid pandemic and classes for the first year started on November 9 2022. The actual number of students who remained after initial drop-outs was 237 (CSE- 160, ECE- 77).

## M.Tech Programme

M.Tech programmes in CSE and ECE which were started in 2018 had an intake of 60 (CSE 35, ECE 25). An online mode was introduced in the M. Tech programme in CSE from 2020. Further, an online mode with the existing Specialization 'Communication and Signal Processing' and a new specialization 'VLSI and Embedded System' were introduced in ECE from 2021. The actual number of students who joined in the year 2022-23 is 54 [CSE (on-campus) – 11], CSE (online) – 23, ECE-CSP (on-campus) – 4, ECE-CSP (online) – 9, ECE-VLSI - 7].

## PhD Programme

The following numbers of students were admitted to the PhD programme in 2022-23.

Department	Full-time	Part-time	Total
CSE	8	2	10
ECE	7	0	7
Science and Mathematics	5	0	5
HSS	7	0	7

Five students – 3 in CSE, 1 in ECE and 1 in HSS, have completed their PhD programmes in 2022-23 and provisional certificates were issued to them.

## Student Profile

At the end of March 2023, there were 1063 students in the Institute with the following profile:

	Male	Female	General	OBC	SC	ST	EWS	Total
B.Tech CSE 2019	122	27	71	45	25	8	0	149
B.Tech ECE 2019	45	11	24	27	4	1	0	56
B.Tech CSE 2020	117	21	69	37	19	13	0	138
B.Tech ECE 2020	42	6	17	20	9	2	0	48
B.Tech CSE 2021	136	26	81	48	21	12	0	162
B.Tech ECE 2021	53	7	24	25	8	3	0	60
B.Tech CSE 2022	136	25	77	45	23	11	5	161
B.Tech ECE 2022	69	9	36	21	13	6	2	78
<b>B.Tech Total</b>	<b>720</b>	<b>132</b>	<b>399</b>	<b>268</b>	<b>122</b>	<b>56</b>	<b>7</b>	<b>852</b>
M.Tech CSE 2021 (online)	9	2	9	0	1	1	0	11
M.Tech CSE 2021 (on-campus)	12	7	12	4	2	1	0	19
M.Tech ECE 2021 (online)	5	3	7	0	1	0	0	8
M.Tech ECE 2021 (on-campus)	9	3	7	4	1	0	0	12
M.Tech CSE 2022 (online)	21	0	17	3	1	0	0	21



M.Tech CSE 2022 (on-campus)	8	3	7	1	1	1	1	11
M.Tech ECE CSP 2022 (online)	7	2	6	0	3	0	0	9
M.Tech ECE CSP 2022 (on-campus)	0	4	2	1	1	0	0	4
M.Tech ECE VLSI 2022	5	2	6	1	0	0	0	7
<b>M.Tech Total</b>	<b>76</b>	<b>26</b>	<b>73</b>	<b>14</b>	<b>11</b>	<b>3</b>	<b>1</b>	<b>102</b>
PhD CSE (Regular)	10	13	19	1	1	2	0	23
PhD CSE (Part-time)	16	7	19	1	3	0	0	23
PhD ECE (Regular)	12	9	17	4	0	0	0	21
PhD ECE (Part-time)	10	5	13	1	0	1	0	15
PhD HSS (Regular)	4	10	11	1	0	2	0	14
PhD HSS (Part-time)	1	1	1	1	0	0	0	2
PhD Maths (Regular)	6	4	6	2	1	1	0	10
PhD Maths (Part-time)	1	0	1	0	0	0	0	1
PhD (Regular)	32	36	53	8	2	5	0	68
PhD (Part-time)	28	13	34	3	3	1	0	41
PhD Total	60	49	87	11	5	6	0	109
<b>Total</b>	<b>856</b>	<b>207</b>	<b>559</b>	<b>293</b>	<b>138</b>	<b>65</b>	<b>8</b>	<b>1063</b>

## Faculty and Staff

The faculty profile at the end of March 2023 is as below:

	Male	Female	Gen	OBC	SC	ST	Total
Associate Prof. CSE	3	1	3	0	1	0	4
Asst. Prof CSE	11	5	11	4	0	1	16
Professor CSE (on contract)	1	0	1	0	0	0	1
Associate Prof ECE	2	1	3	0	0	0	3
Asst. Prof. ECE	8	6	12	1	1	0	14
Associate Prof. Maths	1	0	1	0	0	0	1
Asst. Prof. Maths	2	2	4	0	0	0	4
Associate Prof. HSS	0	1	1	0	0	0	1
Asst. Prof. HSS	4	1	4	1	0	0	5
<b>Total</b>	<b>32</b>	<b>17</b>	<b>40</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>49</b>

The staff profile at the end of March 2023 is as below:

Item	Male	Female	Gen	OBC	SC	ST	Total
Registrar	1	0	1	0	0	0	1
Assistant Registrar	1	0	1	0	0	0	1
Superintending Engineer	1	0	1	0	0	0	1
Senior Superintendent	5	1	4	1	0	1	6
Junior Accounts Officer	1	0	1	0	0	0	1
Senior Technical Superintendent	4	0	1	2	1	0	4
Junior Technical Superintendent	2	0	0	1	1	0	2
Library Information Officer	1	1	0	1	0	1	2
Junior Assistant	8	2	6	2	1	1	10
<b>Total</b>	<b>24</b>	<b>4</b>	<b>15</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>28</b>

# Status of filling up of Backlog Vacancies

## Faculty in position (As on 31.03.2023)

Name of the Post	Position	Filled Up							Vacant						
		OBC	SC	ST	EWS	PWD	Gen	Total	OBC	SC	ST	EWS	PWD	Gen	Total
Professor	84	0	0	0	0	0	0	0							
Associate Professor		0	1	0	0	0	8	9							
Assistant Professor		6	1	1	0	0	31	39	14	9	4	2		7	36
Total		6	2	1	0	0	39	48	14	9	4	2		7	36

## Non-Faculty in position (As on 31.03.2023)

Pay Level	Post sanctioned by MoE/ as per norms of student strength	Category wise breakup of posts						Post filled						Post vacant						Remarks
		UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS	Total	
10,11,12	4	3			1		4	3					3				1		1	
3,7,8	27	14	1	3	7	2	27	12	3	3	7	0	25					2	2	B & C staff in one roster
	31	17	1	3	8	2	31	15	3	3	7	0	28	0	0	0	1	2	3	

# Research and Development

## Publications

The number of publications by faculty members in the year 2022-23 is as in the table below. The overall publications compared to last year remains the same.

Year	Journals	Conferences	Book chapters	Newspaper Articles	Total
2022-23	54	66	6	1	127
2021-22	55	69	7	-	131
2020-21	45	78	8	6	137
2019-20	35	59	3	-	97
2018-19	20	41	3	-	64
2017-18	14	44	3	-	61

## Sponsored Research

An important source of funding for research is sponsored research funding. A number of projects were obtained in the last one year. The details are as follows:

### New Projects granted in April 2022 to March 2023

Sl. no	Project Title	Name of the PI	Funding Agency	Project Amount (INR)	Project start date
1	Machine learning-based computational models for the analysis of monsoon activities over the Indian region at temporal and spatial scale	Dr. Parashjyoti Borah	SERB	18,78,531.00	27.09.2022
2	The Youth Perception on the Rule of Law in India	Dr. L David Lal	Christ University Bangalore	77,000.00	06.06.2022
3	Theoretical Evaluation of Different Strategies (Choice of Kernel, Striding and Pooling)	Dr. Shovan Barma	SERB	6,60,000.00	07.01.2023

	During Implementing Deep Convolution Neural Network (DCNN) Pipeline				
4	Microscopic Image Based Vegetable/Fruit Quality Assessment	Dr. Shovan Barma	IITI DRISHTI CPS	10,00,000.00	31.03.2023
5	Signal Processing and Optimization for Configuring Intelligent Reflecting Surfaces for Smart Cities	Dr. Sudip Biswas	SERB	6,60,000.00	05.01.2023
6	Autonomous Underwater Vehicle for Intelligent real time monitoring and surveillance	Dr. Mourina Ghosh	IIT-TIDF	10,00,000.00	23.01.2023
7	Latency Optimization for Reliable Edge Compute Service Delivery using Reinforcement Learning	Dr. Soumi Chattopadhyay	SERB	17,43,764.00	10.01.2023
8	Service Caching Architecture for Edge Networks	Dr. Radhika Sukapuram	SERB	20,62,544.00	22.06.2022
	<b>Total</b>			<b>90,81,839.00</b>	

**On-going projects from the previous year are given below:**

Sl. no.	Project Title	Name of the PI	Funding Agency	Project Amount (INR)	Project start date
1	Faculty Fellowship	Prof. Gautam Barua	NetApp	4,04,055.00	07.06.2016
2	Establishment of a Design Innovation Centre (DIC)	Director	MHRD through NEHU	63,71,400.00	01.03.2017

	(Spoke) with NEHU (HUB)				
3	Security and Privacy Preserved Automatic Health Emergency Detection and MSP Selection in IoT Based Smart Healthcare System	Dr. Subhasish Dhal	DST-SERB	19,60,268	05.12.2020
4	Detection and Forecasting of Extreme Weather Events in Egypt and India Using Deep Learning	Dr. Shovan Barma	DST (International Bilateral Cooperation Division)	9,10,000	09.02.2021
5	Control-Theoretic Distributed Optimal Resource Allocation Approaches to Hinder Epidemic Spreading over Networks and its Forecasting for Indian Cities	Dr. Surajit Panja	DST-SERB	18,04,000	02.03.2021
6	Study of degree regular maps on surfaces and groups generated by the symmetries of the maps	Dr. Dipendu Maity	NBHM, Dept. of Atomic Energy	15,15,900.00	12.08.2021
7	Study of group actions on degree-regular maps and surfaces with symmetry	Dr. Dipendu Maity	DST-SERB	13,60,634.00	13.12.2021
8	On Performance of structural	Dr. Moumita Roy (Co-PI)	DST-SERB	6,93,000.00	31.12.2021

	damage detection based on:mathematical and machine - learning models in harmony, and domain adaptation with scaled physical model using limited sensors				
9	Design of 8 BIT 1 GSPS Flash ADC	Dr. Sounak Roy	ISRO, Dept. of Space	20,74,000.00	14.02.2022
	<b>TOTAL</b>			<b>1,70,93,257.00</b>	

**Projects that ended in 2022-23 are given below:**

Sl. No.	Project Title	Name of the PI	Funding Agency	Project Amount (INR)	Project ended date
1	Transformations and special values of Gaussian hypergeometric series; and their connections to supercongruences	Dr. Gautam Kalita	DST-SERB	5,02,127.00	Project Duration ended on 16.04.2021
2	Hypergeometric Series, and (super)congruences for Apery-like numbers	Dr. Gautam Kalita	NBHM, Dept. of Atomic Energy	3,72,500.00	Project Duration ended on 23.12.2021
3	Energy Efficient 5G Hybrid Optical Wireless Communication System Based on High-Speed FSO/ VLC Interconnections	Dr.Sanya Anees	DST-SERB	24,17,250.00	Project Duration ended on 17.09.2021
4	Reconfigurable 3DIC Hardware Accelerator Platform for Deep Neural Networks	Dr. Soumyajit Poddar	DST-SERB	27,04,000.00	Project Duration ended on 24.05.2022

5	Apery-like numbers, hypergeometric functions, and related supercongruences	Dr. Gautam Kalita	DST-SERB (MATRICS)	6,60,000.00	Project Duration ended on 20.05.2022
6	"Determinants of Women's Acceptance of Cervical Cancer Screening Program: A case study of Kamrup district of Assam"	Dr. Hari Kanta Choudhury,	ICSSR	4,96,650	Project Duration ended on 30.11.2021
7	Effects of Nonpharmaceutical Measures on COVID-19 Pandemic in India and Network-based Forecast Beyond Relaxation of Lockdown	Dr. Surajit Panja	DST-SERB	5,50,000	Project Duration ended on 06.07.2021
8	Context Aware Service Provisioning Towards Smart Tourism	Dr. Soumi Chattopadhyay	DST-SERB	16,82,200	Project Duration ended on 03.11.2022
9	Design of Structure-Preserving Deep Neural Networks for Improved Generalization	Dr. Kaustav Nag	DST-SERB	15,17,200	Project Duration ended on 06.12.2022
10	Signal processing for co-existence between radar and future communication systems	Dr. Sudip Biswas	DST-SERB	18,19,380	Project Duration ended on 08.12.2022
11	Design and Development of an Assistive Device for Persons with Motor Neuron disease	Dr. Kaustuv Nag Co PI: Dr. Rakesh Matam	DST-SEED	18,99,544	Project Duration ended on 29.03.2023
12	Feasibility study of zero trust in InstaSafe framework	Dr. Srinibas Swain	Instasafe	1,03,400.00	Project Duration ended on 27.06.2022
<b>Total</b>				<b>1,47,24,251.00</b>	



### **List of Ongoing Consultancies**

Sl. no.	Consultant	Consulting Agency	Consultancy Amount (INR)
1	Prof. Gautam Barua	General Insurance Corporation Ltd.	7,00,000.00
2	Prof. Gautam Barua	North Eastern Electric Power Corporation Ltd.	6,00,000.00
3	Prof. Gautam Barua	GIC Housing Finance Ltd.	10,00,000.00

### **Short Term Course conducted in IIITG during April 2022 to March 2023**

Sl. no	Project Title	Name of the PI	Funding Agency	Project Amount (INR)	Event Duration
1	(KARYASHALA)Next-Generation Network Automation for Industrial Internet-of-Things in Industry 5.0	Dr. Sudip Biswas	SERB	5,00,000.00	20 <sup>th</sup> July 2022 to 26 <sup>th</sup> July 2022
2	(VRITIKA) VLSI and Embedded Systems	Dr. Babita Jajodia	SERB	1,50,000.00	5 <sup>th</sup> Dec 2022 to 30 <sup>th</sup> Dec 2022
3	The British Empire and Colonial Famines: History, Culture Critique.	Dr. Rajarshi Mitra	The Royal Society of Edinburg.	3,08,819.00	7 <sup>th</sup> and 8 <sup>th</sup> January 2023

### **COLLABORATIONS**

The Memorandum of Understanding (MoU) of IIITG with other institution/organization (April 2022- March 2023):

#### **I. Newly signed:**

1. Assam Down Town University (AdtU)
2. Meghalaya Administrative Training Institute (MATI)

#### **II. Renewed/ extended:**

1. College of Engineering, National Sun Yat-Sen University, Taiwan
2. Electronics & ICT Academy, located at Indian Institute of Technology Guwahati (IIT Guwahati)

#### **III. Others continuing:**

1. Network "n+i" - engineering institutes, France
2. CDAC, Mohali
3. Software Technology Parks of India (STPI)

## Internal Committee (IC)

In compliance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013 of the Ministry of Law and Justice, Govt. of India, IIT Guwahati has constituted the Internal Complaints Committee in November 2018, which is renamed as Internal Committee by an order of the Government of India.

### I. Number of complaints received by IC during the Year 2022-23: Nil.

Formal Complaints received during the year 2022-23 = Nil.

Informal Complaints received during the year 2022-23 = Nil.

### II. List of IC Meetings held in Year 2022-23

Sl. No.	Description	Meeting Date and Time	Mode	No. of Participants
1	1 <sup>st</sup> Meeting of IC	24 <sup>th</sup> September 2022	Online	5 (all members present)
2	2 <sup>nd</sup> Meeting of IC	9 <sup>th</sup> November 2022	Online	5 (all members present)
3	3 <sup>rd</sup> Meeting of IC	10 <sup>th</sup> March 2023	Online	5 (all members present)

### III. List of Meetings and Programmes conducted by IC during the Year 2022-23:

Sl. No.	Programme	Mode	Target group	Event date
1	POSH awareness training programmes	Online	IITG faculty members and Staffs	25.11.2022
2	Gender Sensitization Programme during Induction Programme	Online	B.Tech 1 <sup>st</sup> year	26.11.2022
3	Display of Posters in Institute Campus (Admin building, Hostels)	Both hard copy and in Institute website	All employees and students	From 25 <sup>th</sup> Nov to 10 <sup>th</sup> Dec 2022
4	Online Poster Competition	Online	All employees and students of IITG	25 <sup>th</sup> Nov 5 <sup>th</sup> Dec 2022

5	Quiz Competition	Online	All employees and students of IITG	6 Dec 2022
6	Self Defense Training program	Physical	All the female employees and students	19 Jan 2023
7	Gender Sensitization Programme	Offline	B.Tech 2 <sup>nd</sup> year	25 Jan 2023
8	Gender Sensitization Programme	Offline	B.Tech 3 <sup>rd</sup> year and M.Tech 1 <sup>st</sup> year	24 Jan 2023
9	Gender Sensitization Programme	Offline	Outsourced staff and domestic workers	8 Mar 2023

# Department of Computer Science Engineering

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## Faculty:

1. Dr. Gautam Barua, Professor, Operating Systems, Networks, Database Management Systems.
2. Dr. Ferdous Ahmed Barbhuiya, Assoc. Professor, Information Security, Intrusion Detection/Prevention System, Secure System Design, Privacy in Cloud, Firewall and Access Control
3. Dr. Moumita Roy, Assoc. Professor, Machine Learning, Soft Computing, Pattern Recognition, Remotely Sensed Image Analysis.
4. Dr. Rakesh Matam, Assoc. Professor, Wireless Networks, Network Security, Privacy in Mobile Networks, Security in IoT.
5. Dr. Subhasish Dhal, Assoc. Professor, Information Security, Cloud Computing, Security in RFID, Key Distribution in Wireless Networks.
6. Dr. Angshuman Jana, Asst. Professor, Formal Methods, Static Program Analysis and Verification, Information Flow Security Analysis, Abstract Interpretation, Model checking.
7. Dr. Aparajita Dutta, Asst. Professor, Machine learning, deep learning, computational biology, bioinformatics, natural language processing
8. Dr. Debashree Devi, Asst. Professor, Artificial Intelligence, Pattern Recognition, Machine Learning, Soft Computing and Data mining.
9. Dr. Kaustuv Nag, Asst. Professor, Evolutionary Computation, Machine Learning, Neural Networks.
10. Dr. Manojit Ghose, Asst. Professor, Cloud computing, Multiprocessor scheduling, Computer architecture.
11. Dr. Nilkanta Sahu, Asst. Professor, Image and Video processing.
12. Dr. Panthadeep Bhattacharjee, Asst. Professor, Data Mining, Machine Learning, Pattern Recognition, Incremental Algorithms.
13. Dr. Parashjyoti Borah, Asst. Professor, Machine Learning, Pattern Classification.
14. Dr. Phrangboklang Lyngton Thangkhiew, Asst. Professor, Computer Architecture, Logic Design using emerging memory technologies.
15. Dr. Radhika Sukapuram, Asst. Professor, Computer Networks, especially Software Defined Networks and Network Functions Virtualisation Distributed Systems.
16. Dr. Rohit Tripathi, Asst. Professor, Game Theory, Online Social Networks and Network Economics.
17. Dr. Sanjay Moulik, Asst. Professor, Real-time Scheduling, Energy Aware Fair Scheduling, Optical Character Recognition, Software Engineering.

18. Dr. Soumi Chattopadhyay, Asst. Professor, Services Computing, Artificial Intelligence, Machine Learning, Formal Methods, Automated logic and reasoning.
19. Dr. Srinibas Swain, Asst. Professor, Algorithms, graph theory, complexity theory, theoretical computer science and discrete mathematics.
20. Dr. Sumit Mishra, Asst. Professor, Algorithms in Evolutionary Computation, Cluster Analysis.
21. Dr. Upasana Talukdar, Asst. Professor, Artificial Intelligence, Machine Learning, Brain-Computer Interface, Knowledge Representation.

### **Adjunct Faculty**

22. Dr. Kuntal Dey, Accenture Ltd, Natural Language Processing
23. Dr. Snehasis Banerjee, TCS Research, Web Reasoning, Machine Learning, Deep Learning, Information Retrieval, Recommendation Systems

### **Publications:**

#### **Journal Publications:**

1. Seema Nagar, Ferdous Ahmed Barbhuiya, Kuntal Dey, "Towards more robust hate speech detection: using social context and user data", Social Network Analysis and Mining, Volume 13, Issue 1, Pages 47, Mar 2023
2. Chandan Kumar Chaudhary, Richa Sarma, Ferdous Ahmed Barbhuiya, "RMA-CPABE: A multi-authority CPABE scheme with reduced ciphertext size for IoT devices", Future Generation Computer Systems, Volume 138, Pages 226-242, Jan 2023
3. Richa Sarma, Ferdous Ahmed Barbhuiya, "A secure and efficient access control scheme with attribute revocation and merging capabilities for fog-enabled IoT" Computers and Electrical Engineering, Volume 104, Pages 108449, Dec 2022
4. Mehbub Alam, Nurzaman Ahmed, Rakesh Matam, Ferdous A Barbhuiya, "IEEE 802.11 ah-Enabled Internet of Drone Architecture", IEEE Internet of Things Magazine, Volume 5, Issue 1, Pages 174-178, Nov 2022, IEEE.
5. L. Gu, M. Mukherjee, M. Guo, J. Lloret and R. Matam, "Low-Cost Assistive Body Temperature Screening System to Combat Communicable Infectious Diseases Leveraging Edge Computing and Long-Range and Low-Power Wireless Networks," in IEEE Internet of Things Journal, vol. 10, no. 5, pp. 4174-4183, 1 March 1, 2023, doi: 10.1109/JIOT.2022.3215484.
6. Kalyanee Devi and Rohit Tripathi. "ASN: A method of optimality for seed identification in the influence diffusion process." Physica A: Statistical Mechanics and its Applications (2023): 128710.

7. Kalyanee Devi and Rohit Tripathi. "Identification of best social media influencers using ICIRS model." *Computing* (2023): 1-23.
8. Nilesh Chakraborty, Yao Chao, Jianqiang Li, Sumit Mishra, Chengwen Luo, Ying He, Jie Chen and Yi Pan, "RTT-based Rogue UAV Detection in IoV Networks", *IEEE Internet of Things Journal*, vol. 9, no. 8, pp. 5909-5919, 2022.
9. Laizhong Cui, Sudipta Acharya, Sumit Mishra, Yi Pan and Joshua Zhexue Huang, "MMCo-Clus – An Evolutionary Co-clustering Algorithm for Gene Selection", *IEEE Transactions on Knowledge and Data Engineering*, vol. 34, no. 9, pp. 4371-4384, 2022.
10. Lier, S., I. Rein, S. Lund, A. Lang, E. Lang, N. Meyer, A. Dutta et al. "CDK12/CDK13 inhibition disrupts a transcriptional program critical for glioblastoma survival." In *NEURO-ONCOLOGY*, vol. 24. JOURNALS DEPT, 2001 EVANS RD, CARY, NC 27513 USA: OXFORD UNIV PRESS INC, 2022.
11. Yanshul Sharma, and Sanjay Moulik. "HEAT: a heterogeneous multicore real-time scheduler with efficient energy and temperature management." *ACM SIGAPP Applied Computing Review* 22.2 (2022): 34-43.
12. Yanshul Sharma, and Sanjay Moulik. "RT-SEAT: A hybrid approach based real-time scheduler for energy and temperature efficient heterogeneous multicore platforms." *Results in Engineering* 16 (2022): 100708.
13. Yanshul Sharma, and Sanjay Moulik. "FATS-2TC: A Fault Tolerant real-time Scheduler for energy and temperature aware heterogeneous platforms with Two types of Cores." *Microprocessors and Microsystems* 96 (2023): 104744.
14. Ramesh Singh.,Radhika Sukapuram and Suchetana Chakraborty. "A survey of mobility-aware Multi-access Edge Computing: Challenges, use cases and future directions". *Ad Hoc Networks*, 2023, 140, p.103044.
15. D. N. Yadav, P. L. Thangkhiew, S. Chakraborty, I. Sengupta, Efficient grouping approach for fault tolerant weight mapping in memristive crossbar array, *Memories - Materials, Devices, Circuits and Systems*, Volume 4, 2023, 100045, ISSN 2773-0646.
16. C. K. Jha, P. L. Thangkhiew, K. Datta and R. Drechsler, "IMAGIN: Library of IMPLY and MAGIC NOR-Based Approximate Adders for In-Memory Computing," in *IEEE Journal on Exploratory Solid-State Computational Devices and Circuits*, vol. 8, no. 2, pp. 68-76, Dec. 2022, doi: 10.1109/JXCDC.2022.3222015.
17. D. N. Yadav, P. L. Thangkhiew, K. Datta, S. Chakraborty, R. Drechsler, I. Sengupta, Feed-Forward learning algorithm for resistive memories, *Journal of Systems Architecture*, Volume 131, 2022, 102730,ISSN 1383-7621.
18. D. N. Yadav, P. L. Thangkhiew, K. Datta, S. Chakraborty, R. Drechsler, I. Sengupta, FAMCroNA: Fault Analysis in Memristive Crossbars for Neuromorphic Applications, *Journal of Electronic Testing* volume 38, pages 145–163 (2022).

19. I. Kalita, G. P. Singh, M. Roy, Crop classification using aerial images by analyzing an ensemble of DCNNs under multi-filter & multi-scale framework, *Multimedia Tools and Applications*, Volume: 82, pages 1-25 (2022).
20. B. Baruah, S. Dhal, A Security and Privacy Preserved Intelligent Vehicle Navigation System, *IEEE Transactions on Dependable and Secure Computing*, Volume 20, number 2, pages 944–959 (2023).
21. A. Pattanayak, M. Dutta, S. Dhal, Privacy Preserved Medical Service Provider Selection in Cloud-based Wireless Body Area Network, *Journal of Wireless Personal Communication*, Volume 128, pages 1349–1371 (2023).
22. Deepak Puthal, Stanly Wilson, Ashish Nanda, Ming Liu, Srinibas Swain, Biswa P. S. Sahoo, Kumar Yelamarthi, Prashant Pillai, Hesham El-Sayed, Mukesh Prasad, Decision tree based user-centric security solution for critical IoT infrastructure, *Computers & Electrical Engineering* 99: 107754, 2022.

### **Conference Publications:**

1. Sangeeta Kakati, Mehbub Alam, Rakesh Matam, Ferdous Ahmed Barbhuiya, Mithun Mukherjee, "Mobility-aware Task Offloading in Fog-Assisted Networks" *IEEE Global Communications Conference (GLOBECOM)* 2022, Pages 2897-2902, Dec 2022, IEEE.
2. Mehbub Alam, Nurzaman Ahmed, Rakesh Matam, Ferdous Ahmed Barbhuiya, "L3Fog: Fog Node Selection and Task Offloading Framework for Mobile IoT" *IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS)* Pages 1-6, May 2022, IEEE.
3. A. Kumar, R. Matam, S. Swain, S. Tripathy, M. Mukherjee and J. Lloret, "Delay Aware Fault-Tolerant Concurrent Data Collection Trees in Shared IIoT Applications," *GLOBECOM 2022 - 2022 IEEE Global Communications Conference*, Rio de Janeiro, Brazil, 2022, pp. 323-328, doi: 10.1109/GLOBECOM48099.2022.10001610.
4. J. Kurmi and R. Matam, "Device Identification in IoT Networks using Network Trace Fingerprinting," *2022 International Conference on Smart Applications, Communications and Networking (SmartNets)*, Palapye, Botswana, 2022, pp. 1-6, doi: 10.1109/SmartNets55823.2022.9994003.
5. Hongyi Ren, Dayu Feng, Mithun Mukherjee, Zhigeng Pan, Mian Guo, Wenzhen Yang, and Rakesh Matam. 2023. GUFFLE: A Design of Lightweight Pressure Interface for Near-to-Real-Time Perceptual Tactile Sensation. In *Proceedings of the 20th ACM Conference on Embedded Networked Sensor Systems (SenSys '22)*. Association for Computing Machinery, New York, NY, USA, 770–771.
6. Kalyanee Devi and Rohit Tripathi. "Applying an Optimal Seed Selection Scheme Under a Progressive Model." *2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT)*. IEEE, 2022.



7. Paras Nigam and Sumit Mishra, "Counterexample to the Best-case Running time of Efficient Non-Dominated Sorting Algorithm", Genetic and Evolutionary Computation Conference Companion (GECCO 2022), Boston, USA, pp. 798-800, July 2022.
8. Ved Prakash, Sumit Mishra and Carlos A. Coello Coello, "On the Computational Complexity of Efficient Non-Dominated Sort using Binary Search", Evolutionary Multi-Criterion Optimization (EMO 2023), Leiden, Netherlands, pp. 419-432, March, 2023.
9. M. Ghose, KP Pandey, N. Chaudhari, A. Sahu, "Soft Reliability Aware Scheduling of Real-time Applications on Cloud with MTTF constraints", in The The 23rd IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing (CCGrid 2023), May 2023 [accepted].
10. V. Deka, A. Islam, M. Ghose, "Cloud-Assisted Dynamic and Cooperative Content Caching in Mobile Edge Computing," in The 19th International IEEE Annual India Conference (INDICON), Dec 2022.
11. Yanshul Sharma, Sanjay Moulik, and Shounak Chakraborty. "RESTORE: real-time task scheduling on a temperature aware FinFET based multicore." 2022 Design, Automation & Test in Europe Conference & Exhibition (DATE). IEEE, 2022.
12. Yanshul Sharma, and Sanjay Moulik. "CETAS: a cluster based energy and temperature efficient real-time scheduler for heterogeneous platforms." Proceedings of the 37th ACM/SIGAPP Symposium on Applied Computing (SAC). 2022.
13. Singh, Ramesh, Radhika Sukapuram, and Suchetana Chakraborty. "Mobility-aware Multi-Access Edge Computing for Multiplayer Augmented and Virtual Reality Gaming." 2022 IEEE 21st International Symposium on Network Computing and Applications (NCA). Vol. 21. IEEE, 2022.
14. Radhika Sukapuram, Sikha Deka."Edge Service Caching for Service Function Chains." ,9th IEEE International Conference on Network Softwarization, 19-23 June 2023 [Accepted]
15. K. Datta, S. Shirinzadeh, P. L. Thangkhiew, I. Sengupta and R. Drechsler, "Unlocking Sneak Path Analysis in Memristor Based Logic Design Styles," 2022 25th Euromicro Conference on Digital System Design (DSD), Maspalomas, Spain, 2022, pp. 793-800,
16. Suraj Kumar, Soumi Chattopadhyay, "TRQP: Trust-Aware Real-Time QoS Prediction Framework Using Graph-Based Learning", , 20th International Conference on Service Oriented Computing (ICSOC), pp. 143-152, Spain, 2022.
17. Soumi Chattopadhyay, Richik Chanda, Suraj Kumar, Chandranath Adak, "OffDQ: An Offline Deep Learning Framework for QoS Prediction", 31st The ACM Web Conference (WWW), pp. 1987-1996, Lyon, France, 2022.
18. Anil Kumar Dasari, Saroj Kr Biswas, Dalton Meitei Thounaojam, Debashree Devi, Biswajit Purkayastha, "Ensemble Learning Techniques and Their



Applications: An Overview", Advances in Cognitive Science and Communications: Selected Articles from the 5th International Conference on Communications and Cyber-Physical Engineering (ICCCE 2022), pp. 897-912, Hyderabad, 2023.

19. Akshit Agarwal, Srinibas Swain, "Correctness of n-parties ECDSA By the Claim of Byzantine Agreement" Proceedings of the 2022 ACM SIGSAC Conference on Computer and Communications Security, CCS, Los Angeles, CA, USA, pp: 3319 – 3321, 2022.
20. Akshit Agarwal, Srinibas Swain, "Blind Two Party ECDSA Signing Based Homomorphic Encryption over Message Passing" in ACS/IEEE International Conference on Computer Systems and Applications (AICCSA), Abu Dhabi, UAE, 2022.
21. Sushmita Paul, Ratanjeet Pratap Chauhan, Srinibas Swain, "Novel ways of enumerating restrained dominating sets of cycles.", International Computer Symposium (ICS), National Taipei University of Business, Taoyuan, Taiwan, 2022.

#### **Book Chapters:**

1. G. Anirudh, and U. Talukdar, (2022). An Experimental Analysis for Credit Card Fraud Detection with Imbalanced and Machine Learning Techniques. In: Patgiri, R., Bandyopadhyay, S., Borah, M.D., Emilia Balas, V. (eds) Edge Analytics. Lecture Notes in Electrical Engineering, vol 869. Springer, Singapore. [https://doi.org/10.1007/978-981-19-0019-8\\_41](https://doi.org/10.1007/978-981-19-0019-8_41)
2. G. Anirudh, and U., Talukdar, (2023). Automated Detection of Type 2 Diabetes with Imbalanced and Machine Learning Methods. In: Doriya, R., Soni, B., Shukla, A., Gao, XZ. (eds) Machine Learning, Image Processing, Network Security and Data Sciences. Lecture Notes in Electrical Engineering, vol 946. Springer, Singapore. [https://doi.org/10.1007/978-981-19-5868-7\\_3](https://doi.org/10.1007/978-981-19-5868-7_3)
3. B. Choudhary, A. Babu, A., and U. Talukdar, (2023). An Ensemble MultiLabel Classifier for Intra-Cranial Haemorrhage Detection from Large, Heterogeneous and Imbalanced Database. In: Patel, K.K., Santosh, K.C., Patel, A., Ghosh, A. (eds) Soft Computing and Its Engineering Applications. icSoftComp 2022. Communications in Computer and Information Science, vol 1788. Springer, Cham. [https://doi.org/10.1007/978-3-031-27609-5\\_26](https://doi.org/10.1007/978-3-031-27609-5_26)
4. A. Pattanayak, S. Dhal (2022). Blockchain in Healthcare. In: Manoj Kumar M V, Annappa B, Likewin T, Sourav K. A, Niranjnamurthy M. (eds) Blockchain Technology and Applications, Chapter 8 of 1st Edition, CRC Press, Taylor and Francis Group, ISBN: 9781032054438.

### Invited Talks:

1. Panthadeep Bhattacharjee delivered an invited talk titled "Machine Learning with focus on unsupervised incremental clustering algorithm" in a two-day workshop on "Computer Architecture and Machine Learning" under digital skilling and AKAM organised by the Department of Computer Science and Engineering, SITM Guwahati on 23-24 September 2022.
2. Aparajita Dutta delivered a talk on "Deep Learning for NLP" at Assam Engineering College, Guwahati on 30 June 2022.
3. Aparajita Dutta delivered a talk on "Scope and demand of AI/ML" organized under the Student Induction Program of AICTE at Regional Institute of Science and Technology (RIST), Meghalaya on 19 September 2022.
4. Manojit Ghose delivered a talk on "Future Technologies in Computing Systems" organized by Assam Science Technology and Environment Council (ASTEC) at Vigyan Utsab on 31 May 2022.
5. Rakesh Matam delivered a talk on "Email Security" as part of Management of Digital Hygiene: Staying Secure in Cyber Space organised by CDAC Mohali on 23 August 2022.
6. Rakesh Matam delivered a talk on "Device Security in IoT" as part of the conference Advances in Computer Engineering and Communication Systems" (ICACECS-2022) organised by VNR Vignana Jyothi Institute of Engineering and Technology on 12th August 2022.
7. Rakesh Matam delivered an invited session talk on "Fog-Computing for Co-operative Internet of Things" in International Conference on Data, Electronics and Computing (ICDEC-2022), NEHU, Shillong on 7th September 2022.
8. Phrangboklang Lyngton Thangkhiew delivered an invited talk titled "Basics of Computer Architecture and Hands-on training on MIPS simulator" in a two-day workshop on "Computer Architecture and Machine Learning" under digital skilling and AKAM organised by the Department of Computer Science and Engineering, SITM Guwahati on 23-24 September 2022.
9. Subhasish Dhal delivered an Invited Talk titled "Introduction to Distributed consensus" in Online – Six Day Faculty Development Training Program on "Blockchain", Organized by Department of Computer Science and Engineering, Kamaraj college of Engineering and Technology(Autonomous), S.P.G. Chidambara nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam-625 701, Near Virudhunagar, January 2023
10. Subhasish Dhal delivered an Invited Talk titled "Cybersecurity" at International workshop on "Recent Trends in Computing & Informatics (RTCI) Autumn Season", Organized by Haldia Institute of Technology, Haldia, Purba Medinipur, West Bengal, India, November 2022.

11. Subhasish Dhal delivered an Invited Talk titled "Reliabilities of the Third Parties in IoT based Applications" at Faculty Development Program on "Recent Trends in Cyber Security & Blockchain Technology", Organized by Oriental Institute of Science and Technology (OIST), Bhopal, July 2022.
12. Srinibas Swain delivered an Invited Talk titled "Problem Solving Techniques, KIIT Polytechnic (KIIT Group of Institutions)", November 2022.
13. Srinibas Swain, delivered a keynote talk in the International Faculty Development Program on "Emerging Concepts in Modern Computational Systems (EMCS-2023)" organized by the Department of Computer Science & Engineering, Brainware University, and Technically sponsored by CSI Brainware University Student Chapter from 4th – 15th February, 2023.
14. Ferdous A Barbhuiya conducted a tutorial on "Cloud Computing with AWS: A Hands on Workshop ", in the IEEE Sponsored Fourth International Conference on Computing and Communication Systems held on 15th March 2023 at North-Eastern Hill University, Shillong.
15. Ferdous A Barbhuiya delivered a talk on "AI in Industry" in the workshop on Application of Artificial Intelligence held on 23rd Feb 2023 at Gauhati University.
16. Ferdous A Barbhuiya delivered a talk on "Current Security, Emerging Cyber Threat & Mitigation" in State Level Awareness Workshop of e-Governance Standards & Guidelines among ICT&E Industry organized by Meity for the North-eastern region states, conducted in Guwahati from 10th to 11th Feb 2023
17. Ferdous A Barbhuiya delivered a talk on "Blockchain Technology Introduction and Architecture" in AICTE Sponsored Six Day Faculty Development Training Programme (online) organized by Kamraj College of Engineering and Technology, Chennai during 02-07 Jan 2023
18. Ferdous A Barbhuiya delivered a talk on " Social Media Security" in the staff training program at NIRDPR-NERC, Guwahati on 8th November, 2022
19. Ferdous A Barbhuiya delivered a talk on "Applications of AI and Cyber Security in Solar PV Plant" in the One Week Capacity Building Program on Solar PV Power Plant at National Power Training Institute-NER, Guwahati during 19-23 Sep 2022
20. Ferdous A Barbhuiya delivered a talk on "Secure Smart Contract" in the Faculty Development Program (Online) on Blockchain Technology - Insights & Open Challenges organized by Oriental Institute of Science & Technology, Bhopal during 22-26 Aug 2022
21. Ferdous A Barbhuiya delivered a talk on "Cyber Security and Emerging Cyber Threats" Organized by Directorate of Information Technology, Electronics and Communication(DITEC) for officers of various departments of Assam Govt. held on 18h of August, 2022, at Assam Administrative Staff College, Khanapara.

22. Ferdous A Barbhuiya delivered a talk on "Digital Hygiene Staying Safe in Cyberspace" in the Online Workshop on Cyber Security for the Postal Staff of Assam and North East States organized by Postal Training Centre, Guwahati on 5th July 2022.
23. Ferdous A Barbhuiya delivered a talk on "Security Challenges in Cloud Data Storage" at CIT Kokrajhar on behalf of IEEE Guwahati Subsection on 29 Jun 2022.
24. Gautam Barua delivered a talk "Digital Era & Quality Higher Education" at Assam Downtown University, Guwahati, on 17 July 2022.

#### **Participation in National Level Committees:**

1. Rakesh Matam is a member of India Internet Engineering Society (IIESoc): IPv6 Project, a project to further the adoption of IETF standards and increase awareness & participation in the IETF process.

#### **Any Others:**

1. Srinibas Swain along with three undergraduate students (Sachin Agarwal, Sahil Bajaj and Ojasv Singh) bagged a World Rank 8 in heuristic track of Parameterized Algorithms and Computational Experiments (PACE) challenge 2021 in general category (World Rank 2 in student category). (<https://pacechallenge.org/2021/results/>).
2. Srinibas Swain along with three undergraduate students (Sachin Agarwal, Sahil Bajaj and Ojasv Singh) bagged a World Rank 8 in exact track of Parameterized Algorithms and Computational Experiments (PACE) challenge 2021 in general category (<https://pacechallenge.org/2021/results/>).

# Department of Electronics & Communication Engineering

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## Faculty:

1. Dr. Babita Jajodia, Asst. Professor, VLSI and Embedded Systems.
2. Dr. Bidisha Dasgupta, Associate Professor, Antenna Design.
3. Dr. Bijit Kumar Das, Asst. Professor, Signal Processing.
4. Dr. G Aruna, Asst. Professor, Wireless Communication.
5. Dr. Komal Janghel, Asst. Professor, Wireless communication.
6. Dr. Kukil Khanikar, Asst. Professor, Communication Engineering.
7. Dr. Mohd. Mansoor Khan, Asst. Professor, Electrical Machines and Drives, Control Systems, Advanced Instrumentation and Sensors, Opto-Mechanical Sensors, Fiber Optics and Photonics, Fiber Optic Lasers and All Optical Integrated Devices.
8. Dr. Mourina Ghosh, Asst. Professor, VLSI Design.
9. Dr. Rakesh Biswas, Asst. Professor, VLSI Architecture Design for Biomedical Signal and Image processing.
10. Dr. Ripudaman Singh, Asst. Professor, Communication Networks.
11. Dr. Rusha Patra, Asst. Professor, Image Processing, Optical Imaging, Biomedical Optics, Computer Vision.
12. Dr. Sanya Anees, Asst. Professor, Optical Wireless communication, Cooperative communications, and Multiple-input multiple-output (MIMO) systems.
13. Dr. Shilpa, Asst. Professor, Wireless Sensor Networks.
14. Dr. Shovan Barma, Associate. Professor, Biomedical Signal Processing and AI.
15. Dr. Sounak Roy, Asst. Professor, Analog and mixed signal circuits.
16. Dr. Sudip Biswas, Asst. Professor, Signal Processing and Machine Learning for Future Wireless Communications, Full-Duplex Radios, Communication-Radar Co-existence.
17. Dr. Surajit Panja, Associate Professor, Control of Network Systems, Multi-agent Systems, Opinion Dynamics, Epidemic Propagation Over Networks.

## Publications:

### Journal:

1. Jitumani Sarma and Rakesh Biswas, "A power-aware ECG processing node for real-time feature extraction in WBAN," in Microprocessors and

Microsystems, Volume 96, 2023, 104724, ISSN 0141-9331, <https://doi.org/10.1016/j.micpro.2022.104724>.

2. Jitumani Sarma, Shatadal Chatterjee, Rakesh Biswas and Sounak Roy, "A digitally controlled adaptive LDO for power management unit in sensor node," in *Integration*, Volume 87, 2022, Pages 29-39, ISSN 0167-9260, <https://doi.org/10.1016/j.vlsi.2022.06.004>.
3. Jitumani Sarma and Rakesh Biswas, "A VLSI-Based Hybrid ECG Compression Scheme for Wearable Sensor Node," in *IEEE Sensors Letters*, vol. 6, no. 4, pp. 1-4, April 2022, Art no. 6001304, doi: 10.1109/LSENS.2022.3157030.
4. K. Singh, P. -C. Wang, S. Biswas, S. K. Singh, S. Mumtaz and C. -P. Li, "Joint Active and Passive Beamforming Design for RIS-Aided IBFD IoT Communications: QoS and Power Efficiency Considerations," in *IEEE Transactions on Consumer Electronics*, vol. 69, no. 2, pp. 170-182, May 2023.
5. P. Saikia, S. Biswas, K. Singh and C. -P. Li, "Signal Detection in GSM-Based In-Band Full-Duplex Communication Using DNN," in *IEEE Transactions on Vehicular Technology*, vol. 72, no. 2, pp. 2661-2666, Feb. 2023.
6. A. Mondal, A. M. A. Junaedi, K. Singh and S. Biswas, "Spectrum and Energy-Efficiency Maximization in RIS-Aided IoT Networks," in *IEEE Access*, vol. 10, pp. 103538-103551, 2022.
7. B. Hazarika, K. Singh, S. Biswas and C. -P. Li, "DRL-Based Resource Allocation for Computation Offloading in IoV Networks," in *IEEE Transactions on Industrial Informatics*, vol. 18, no. 11, pp. 8027-8038, Nov. 2022.
8. J. Sharma, S. Chatterjee, R. Biswas and S. Roy, "A digitally controlled adaptive LDO for power management unit in sensor node", *Integration*, Elsevier, Vol :87, pg 29-39, November, 2022.
9. S. Chatterjee and S. Roy, "A low power offset voltage calibration method for flash ADCs", *Integration*, Elsevier, Vol :88, pg 58-69, January, 2023
10. Mourina Ghosh, Pulak Mondal, Shekhar Suman Borah, Santosh. Kumar, "Resistorless Memristor Emulators: Floating, Grounded using OTA and VDBA for high frequency applications," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, Vol. 42,3, page 978-986, March 2023.
11. S. Bhowmick and S. Panja, "Analysis of Epidemic Spreading with Opinion Evolution in Multiplex Network," in *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 70, no. 2, pp. 695-699, Feb. 2023, doi: 10.1109/TCSII.2022.3212268
12. .Jia Wen Li, Rong Jun Chen, Shovan Barma, Fei Chen, Sio Hang Pun, Peng Un Mak, Lei Jun Wang, Xian Xian Zeng, Jin Chang Ren, Hui Min Zhao, "An Approach to Emotion Recognition Using Brain Rhythm Sequencing and



Asymmetric Features," Cognitive Computation (Springer), 2022, DOI: 10.1007/s12559-022-10053-z.

13. Anand Shankar, Samarendra Dandapat, and Shovan Barma, "Discrimination of Types of Seizure Using Brain Rhythms Based on Markov Transition Field and Deep Learning" IEEE Open Journal of Instrumentation and Measurement, 2022 DOI: 10.1109/OJIM.2022.3202555.

### **Conference:**

1. Jitumani Sarma and Rakesh Biswas, "A Power-Aware ECG Transmission Framework with Server Aided Lossless Compression," 2022 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS), Shenzhen, China, 2022, pp. 95-99, doi: 10.1109/APCCAS55924.2022.10090374.
2. Pradyut K. Sanki and Rakesh Biswas, "Depth Invariant Real-time Fixed/Random Valued Impulse Noise Removal Algorithm for Back-end of Ultrasonography Systems," 2022 IEEE International Symposium on Smart Electronic Systems (iSES), Warangal, India, 2022, pp. 202-207, doi: 10.1109/iSES54909.2022.00049.
3. P. Saikia, K. Singh, O. Taghizadeh, W. -J. Huang and S. Biswas, "DRL Algorithms for Efficient Spectrum Sharing in RIS-aided MIMO Radar and Cellular Systems," IEEE Military Communications Conference (MILCOM), Rockville, MD, USA, 2022, pp. 55-60.
4. B. Hazarika, K. Singh, C. -P. Li and S. Biswas, "Multi-Agent DRL-Based Computation Offloading in Multiple RIS-Aided IoV Networks," IEEE Military Communications Conference (MILCOM), Rockville, MD, USA, 2022, pp. 1-6,
5. U. Singh, J. Bajaj, B. K. Kanaujia, S. Biswas, "Transceiver and Phase Optimization for RIS-assisted Hardware-impaired MIMO Cellular Systems," in Proc., IEEE INDICON, 2022.
6. B. Hazarika, K. Singh, S. Biswas, S. Mumtaz, and C-P. Li, "SAC-Based Resource Allocation for Computation Offloading in IoV Networks," in Proc., European Conference on Networks and Communications (EuCNC) and the 6G Summit, 2022.
7. A. Mondal and S. Biswas, "Performance Analysis of RIS Aided IBFD STAR Wireless Networks," National Conference on Communications (NCC), Mumbai, India, 2022, pp. 148-153.
8. Mohd Mansoor Khan, and Narendra Singh Gurjar, "Pump and Signal Optimization in Thulium doped fiber amplifiers for S-Band with Amplified Spontaneous Emission and Ion-Ion Interactions", 9th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering, 2022 (UPCON-2022), pp. 1-6, IIT Allahabad, India, 2022.
9. Mohd Mansoor Khan, Nilesh Sharma, and Ramesh Kumar Sonkar, "Sensing of targeted Micro-Nano Plastic pollutants in Water Bodies with Optimized Opto-Metamaterial: Surface Plasmon Resonance Approach", 45th OSI-

Conference on Optics, Photonics & Quantum Optics Conference (CoPAQ 2022), IIT Roorkee, India, 2022

10. Mohd Mansoor Khan, "Disease Detection Through Novel Breath-Analyzer Using Optimized Sub-Wavelength Nano-Cuboidal Metal-Graphene Metamaterial Layer on Optical Fiber", IEEE International Conference on Photonics 2022 (ICP2022), pp. 23-24, Malaysia, 2022.
11. Mohd Mansoor Khan, "Intelligent End-to-End Human-Fall Detection System with IMU Sensors and Machine Learning", 5th EMPOWER 2022 Conference, IIT Madras, Chennai, India, 2022.
12. Mohd Mansoor Khan, and Ramesh Kumar Sonkar, "Parametric Optimization of 3D Gold-Graphene Nano-Gratings on Optical Fiber for Ubiquitous Sensing Applications: Mathematical Analysis", IEEE TENSYP2022, pp. 1-6, India, 2022.
13. Mohd Mansoor Khan, and Ramesh Kumar Sonkar, "Economically viable solution of Portable Spectrophotometer for Glucose and Blood traces detection in simulated Human-Urine for early disease diagnosis", North East Research Conclave (NERC 2022, Indian Institute of Technology Guwahati), Vol. 1, 0420U1356, India, 2022.
14. Mohd Mansoor Khan, Prateek Jaiswal, Mohit Mishra, and Ramesh Kumar Sonkar, "Strategic-cum-Domestic vehicular movement detection through Deep Learning approach using designed Fiber-Optic distributed vibration sensor", 2022 IEEE 7th International Conference for Convergence in Technology (I2CT), pp. 1-6. IEEE, India, 2022.
15. Mohd Mansoor Khan, Priyam Raj, and Sanu Kumar, "Cost-Effective early warning solution for Anisocoria Eye-Disease through Optical Sensing and Machine Learning: A Preliminary Analysis", IEEE International Conference on Recent Advances in Electrical, Electronics & Digital Healthcare Technologies, 2023 (REEDCON 2023), Jamia Millia Islamia, New Delhi, India, 2023 (Accepted and Presented).
16. A. Antony and B. Dasgupta, "A Simple Frequency Selective Surface Based Reflector for UWB Applications," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 12th - 15th December, 2022.
17. A. Antony, B. Dasgupta and S. P. Janjarla, "Effect of Pulse Width on Various Performance Parameters of UWB Antenna in Time Domain Analysis," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 12th - 15th December, 2022.
18. P. Prakash and B. Dasgupta, "Dielectric Resonator Loaded U-shaped Printed Hybrid Antenna for Multiband Wireless Applications," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 12th - 15th December, 2022.
19. D. Pandey, V. Mishra, S. Singh, S. Satapathy, B. Jajodia and D.S. Banerjee, "HPAM: An 8-bit High-Performance Approximate Multiplier Design for Error Resilient Applications", in 2022 IEEE 23rd International Symposium on



Quality Electronic Design (ISQED), Santa Clara, California, USA, 6-8 April, 2022.

20. S. Singh, V. Mishra, S. Satapathy, D. Pandey, K. Goswami, D.S. Banerjee and B. Jajodia, "EFCSA: An Efficient Carry Speculative Approximate Adder with Rectification", in 2022 IEEE 23rd International Symposium on Quality Electronic Design (ISQED), Santa Clara, California, USA, 6-8 April, 2022.
21. V. Mishra, D. Pandey, S. Singh, S. Satapathy, K. Goswami, B. Jajodia and D.S. Banerjee, "ART-MAC: An Approximate Rounding and Truncation Based MAC Unit for Fault-Tolerant Applications", in 2022 IEEE International Symposium on Circuits and Systems (ISCAS), Austin, Texas, USA, 28 May-June 1, 2022
22. P. Das and B. Jajodia, "Design Automation of Two-Stage Operational Amplifier Using Multi-Objective Genetic Algorithm and SPICE Framework," in 2022 IEEE 5th International Conference on Inventive Computation Technologies (ICICT), Lalitpur, Nepal, 20-22 July, 2022
23. M. Thakare and B. Jajodia, "Hardware Implementation for Determining Perfect and Non-Perfect Square Roots using Dwandwa Yoga on FPGA", in 2022 IEEE International Conference on Electrical, Computer and Energy Technologies (ICECET), Prague, Czech Republic, 20-22 July, 2022
24. M. Karthik, J. Lalwani and B. Jajodia, "Quantum Text Teleportation Protocol for Secure Text Transfer by using Quantum Teleportation and Huffman Coding ", in 2022 IEEE International Conference in Trends in Quantum Computing & Emerging Business Technologies, Christ (Deemed to be University), Pune Lavasa Campus, 13-15 October, 2022
25. A. Chandra, J. Lalwani and B. Jajodia, "Towards an Optimal Hybrid Algorithm for EV Charging Stations Placement using Quantum Annealing and Genetic Algorithms ", in 2022 IEEE International Conference in Trends in Quantum Computing & Emerging Business Technologies, Christ (Deemed to be University), Pune Lavasa Campus, 13-15 October, 2022
26. M. Karthik, J. Lalwani and B. Jajodia, "Quantum Image Teleportation Protocol (QITP) and Quantum Audio Teleportation Protocol (QATP) by using Quantum Teleportation and Huffman Coding ", in 2022 IEEE International Conference in Trends in Quantum Computing & Emerging Business Technologies, Christ (Deemed to be University), Pune Lavasa Campus, 13-15 October, 2022
27. M. Das and B. Jajodia, "Hardware Design of Optimized Large Integer Schoolbook Polynomial Multiplications on FPGA", in 2022 19th IEEE International SoC Conference (ISOCC), Lakai Sandpine Resort, Gangneung-si, Gangwon-do, Korea, 19-20 October, 2022
28. M. Das and B. Jajodia, "FPGA Implementation of Hybrid Karatsuba Multiplications for NIST Post-Quantum Cryptographic Hardware Primitives", in 2022 19th IEEE International SoC Conference (ISOCC), Lakai Sandpine Resort, Gangneung-si, Gangwon-do, Korea, 19-20 October, 2022

29. Amal Thomas, Soumyajit Poddar, Mourina Ghosh, Amitava Nag, "Realtime Object Detection for Unmanned Underwater Vehicles using Movidius Neural Compute Stick", ICNET 2023, NIT Manipur, India (Paper Presented)
30. K. Janghel, "Performance Analysis of IRS Assisted Underlay Cognitive Radio Networks," 2022 IEEE 19th India Council International Conference (INDICON), Kochi, India, 2022, pp. 1-5, doi: 10.1109/INDICON56171.2022.10040197.
31. R. Patra and B. Sharma, "Development of a Low-cost, Portable Telepathology System for Smart Village using Foldscope," 2022 IEEE International Symposium on Smart Electronic Systems (iSES), Warangal, India, 2022, pp. 574-577, doi: 10.1109/iSES54909.2022.00125.
32. S. Verma, I. Singh, K. Ray, R. Patra and D. Das, "iCAT: Intelligent Cataract Detection using Deep Neural in Smartphone," 2022 IEEE WIECON-ECE, 30-31 December, 2022, IIIT-NR, India.
33. P. Mallick and S. Panja, "Analysing the Effects of Lockdown & Vaccination to Inhibit the Spread of COVID-19 in India with a Networked SUVIRD Model," 2022 8th International Conference on Control, Decision and Information Technologies (CoDIT), Istanbul, Turkey, 2022, pp. 831-836, doi: 10.1109/CoDIT55151.2022.9804144.
34. P. Mallick, S. Paul and S. Panja, "Analysis and Evolution of Airport Network of India," TENCON 2022 - 2022 IEEE Region 10 Conference (TENCON), Hong Kong, Hong Kong, 2022, pp. 1-5, doi: 10.1109/TENCON55691.2022.9977872.
35. Maloth Santhoshi, Shovan Barma, Debaprasad Das, "An Overview of Artificial Neuromorphic Circuits" in IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), Kolkata, 26-27 Nov. 2022, DOI: 10.1109/EDKCON56221.2022.10032851.

#### **Book Chapter:**

1. Shekhar Suman Borah, Mourina Ghosh, "CDBA-Based MOS-C Quadrature Oscillator", Lecturer Notes of Electrical Engineering, LNEE, Volume 877, September 2022.

#### **Workshop/Talk Organized:**

1. Workshop organized on "High-End Workshop (Karyashala) Next-Generation Network Automation for Industrial Internet-of-Things in Industry 5.0., 6 to 22-May-2022, Coordinated by Dr. Sudip Biswas, Sponsored by SERB, DST, Govt. of India.
2. A Talk on "IOT-based air pollution monitoring" delivered by Dr. Mohd Shahrul Mohd Nadzir, National University of Malaysia, at IIIT Guwahati, Coordinated by Mourina Ghosh.
3. A Talk on "Automated detection, localisation, and classification of physical/biomedical events in uncontrolled setting" delivered by Dr. Harish K Sardana, Presently Director IIIT Raichur, at IIIT Guwahati, Coordinated by Dr. Mohd Mansoor Khan.

4. A Talk on “Image processing for precision health care” delivered by Dr. Gajendra Kumar Mourya, Assistant Professor, North-Eastern Hill University, at IIIT Guwahati, Coordinated by Dr. Surajit Panja.

#### **Invited Talk:**

1. Dr. Mohd Mansoor Khan delivered a talk on “FDP-Enriching Technologies in Fiber Optical Communication and Networks, “Fiber Optic Communication & Sensors: General Overview, Improvised Aspects and Metamaterials” in Academic Staff College-Vellore Institute of Technology (VIT Vellore), India, 17--19 April 2023.
2. Dr. Mohd Mansoor Khan delivered a talk on “Electronics, Photonics, and IC at the 75th Anniversary of Transistor”, “Fiber-Optics Communication System: General Overview and Improvised Aspects,” in Electronics and Communication Engineering (ECE) Department of the National Institute of Technology (NIT) Delhi, from February 20-25, 2023.
3. Dr. Mohd Mansoor Khan delivered a talk on “IETE Zonal Seminar (East Zone) in Next Generation Wireless, “Fiber-Optics Communication System: General Overview and Improvised Aspects,” in Indian Institute of Technology Guwahati, India, 27--28 May 2022.
4. Dr. Mourina Ghosh delivered a talk on “Design of Amplifier using MOSFET, in One Week Workshop in Electronic Circuit and PCB Designing (ECPCD-2022), organized by Dept. of E.C.E and Dept. of EE,K.K.Polytechnic, Dhanbad, India from 26-30th September, 2022.
5. Dr. Sudip Biswas delivered a talk on “Planning Your Research: A Guide” in One-week SERB sponsored High-end Workshop (Karyashala) on “Next-Generation Network Automation for Industrial Internet-of-Things in Industry 5.0”, organized by IIIT Guwahati, July. 20 - 26, 2022.
6. Dr. Sudip Biswas delivered a talk on “Responding to Reviewers: My Stories” in One-week SERB sponsored High-end workshop (Katyashala) on “Methods for Creating a Quality Research Article: Software and Writing Perspective”, organized by the IIIT Kottayam, Jul. 18 - 24, 2022
7. Surajit Panja delivered a talk on “Multi-agent Systems and its Various Facets” in Short Term Course (STC) on “Optimization and Control Design Techniques Innovations and Challenges” at Dr. B. R. Ambedkar National Institute of Technology Jalandhar, May 23-27, 2022.
8. Shovan Barma delivered a talk on “Deep Learning Implementation for IoT” at One Week High-End Workshop on Next-Generation Network Automation for Industrial Internet-of-Things in Industry 5.0 on 23 July 2022, Organized by Indian Institute of Information Technology Guwahati (IIITG), Guwahati, Assam – 781015.
9. Shovan Barma delivered a talk on “Electroencephalogram (EEG) Based Emotion Recognition” at at National Workshop On Artificial Intelligence in Healthcare (NWAIH-2022) on 5 August 2022, Organized by Jalpaiguri Government Engineering College, Jalpaiguri, West Bengal 735102.

10. Shovan Barma delivered a talk on “Stimuli Design For Emotion Elicitation: A Case Study for EEG Based Emotion Recognition” on 10 IEEE International Conference on Orange Technology on 11 November 2022, Virtual Mode.
11. Shovan Barma delivered a talk on “Stimuli in Electroencephalogram (EEG) Based Emotion Recognition” at Workshop On Brain Computer Interface on 10 March 2023 at Indian Institute of Information Technology Guwahati (IIITG), Guwahati, Assam – 781015.

#### **Other Activities:**

1. Dr. Sudip Biswas as TPC member for IEEE GLOBECOM 2022 (Selected Areas in Communications: Machine Learning for Communications)
2. Dr. Sudip Biswas as a TPC member for IEEE ICC 2022 (Selected Areas in Communications: Machine Learning for Communications)
3. Dr. Sudip Biswas, Editor, IEEE Transaction on Green Communications (TGCN)
4. Dr. Mourina Ghosh as a PC member of IEEE CICT 2022.
5. Dr. Mohd Mansoor Khan, Elected Fellow IETE 2023.
6. Dr. Mohd Mansoor Khan, Session Chair, IEEE REEDCON 2023.
7. Dr. Mohd Mansoor Khan, Session Chair, IEEE I2CT 2022.
8. Dr. Mohd Mansoor Khan, TPC, IEEE Globconpt 2023.
9. Dr. Surajit Panja, TPC, IEEE CoDIT 2023.
10. Dr. Surajit Panja, Session Chair, ICDAI-2023, Kolkata.
11. Dr. Shovan Barma, Associate TPC Chair, IEEE International Instrumentation and Measurement Technology Conference (I2MTC) on May 22 - 25, 2023 Kuala Lumpur Malaysia
12. Dr. Shovan Barma TPC Member: 10 IEEE International Conference on Orange Technology on 10-11 November 2022, Virtual Mode

#### **Other Achievements:**

1. Dr. Sudip Biswas, Exemplary Editor 2023, IEEE Transactions on Green Communications, IEEE Communications Society
2. Dr. Mohd Mansoor Khan, Elected Fellow IETE 2023.

# Department of Science and Mathematics

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## Faculty:

1. Dr. Gautam Kalita, Associate Professor, Number Theory, Algebra, Cryptography.
2. Dr. Anuradha Jha, Assistant Professor, Numerical solutions of ordinary and partial differential equations, Singular perturbation problems.
3. Dr. Dipendu Maity, Assistant Professor, Topology and Geometry
4. Dr. Shyamal Ghosh, Assistant Professor, Reliability Theory, Distribution Theory.
5. Dr. Farha Sultana, Assistant Professor, Lifetime Data Analysis, Reliability Theory, Estimation Theory.

## Publications in Journals:

1. F. Sayed & **G. Kalita**, Moments of Kloosterman sums, supercharacters, and elliptic curves, Indian J. Pure Appl. Math. 54, 200--209 (2023).
2. A. S. Chetry & **G. Kalita**, Lauricella hypergeometric series  $F_A^n$  over finite fields, Ramanujan J. 57, 1335--1354 (2022).
3. A. Jana & **G. Kalita**, Supercongruences motivated by some generalized VanHamme type congruences, Res. Number Theory 8, Article 54, pp (2022).
4. F. Sayed & **G. Kalita**, Eighth power moment of Kloosterman sums and elliptic curves via supercharacters, Ramanujan J. 58, 801--814 (2022).
5. **S. Ghosh**, P. Bhuyan & M. Finkelstein, On a bivariate copula for modeling negative dependence: application to New York air quality data, Statistical Methods & Applications 31 (5), 1329--1353, 2022.
6. **S. Ghosh** & P. Majumder, A moment inequality for decreasing mean time to failure distributions with hypothesis testing application, Journal of Statistical Computation and Simulation 92 (14), 2875--2890, 2022.
7. N. Roy & **A. Jha**, A parameter uniform method for two-parameter singularly perturbed boundary value problems with discontinuous data, MethodsX 10, 2023.
8. C. Cetinkaya, **F. Sultana**, and D. Kundu, Exact Likelihood Inference for Two Exponential Populations under Jointly Generalized Progressive Hybrid Censoring, Journal of Statistical Computation and Simulation 92(17), 3605-3629, 2022.
9. A. K. Mahato, **F. Sultana**, Y. M. Tripathi, and M. K. Rastogi, Statistical Inference for a Gumbel Type-II Distribution under Hybrid Censoring, Journal of Statistical Computation and Simulation 92(11), 2290-2316, 2022.

10. **F. Sultana**, C. Cetinkaya, and D. Kundu, Statistical Inference for the Jointly Adaptive Progressive Type-II Censored Weibull Distributions, Journal of Statistical Theory and Practice, 17(2), 0-24, 2022
11. S. Dutta, **F. Sultana**, and S. Kayal, Parametric Analysis of Gumbel Type-II Distribution under Step-stress Life Test, Iranian Journal of Science and Technology, Transactions A: Science, 47 (5), 155-173, 2023.
12. T. Koley, **F. Sultana**, and A. Dewanji, Parametric Analysis of Tampered Random Variable Model for Multiple Step-Stress Life Test, Journal of Statistical Theory and Practice, 17(2), 0-28, 2023.

#### Presentation in Conferences:

1. Nirmali Roy & **Anuradha Jha**, Parameter uniform numerical method for singularly perturbed two parameters parabolic problem with discontinuous convection coefficient and source term, 4th International Conference on Mathematical Modelling, Applied Analysis and Computation 2022 (ICMMAAC-22), JECRC University, Jaipur (Raj.) India, 4th-6th August, 2022.
2. Nirmali Roy & **Anuradha Jha**, A parameter uniform method for two-parameter singularly perturbed boundary value problems with discontinuous data, 37th Annual Conference of Ramanujan Mathematical Society.
3. **Farha Sultana**, Exact Inference for Two Exponential Populations under Joint Adaptive Type-II Progressive Censoring, International Workshop on Reliability Theory and Survival Analysis (IWRTSA) organized by Department of Mathematics and Statistics, IISER Kolkata, December 23-25, 2022.

#### Invited Talk/Outreach Program by Faculty:

1. **Gautam Kalita** delivered an online talk titled " $\pi$ , continued fraction, and irrationality" on International Day of Mathematics (also known as  $\pi$  day) organized by Department of Mathematics, Bhola Nath College, Dhubri, Assam, March 14, 2023.
2. **Gautam Kalita** delivered a offline talk titled " $\pi$ , irrationality, and infinite series" on International Day of Mathematics (also known as  $\pi$  day) organized by Department of Mathematics, Assam Don Bosco University, Guwahati, March 14, 2023.
3. **Farha Sultana** delivered a talk titled "Tampered Random Variable Modeling for Multiple Step-stress Life Test" on the International Indian Statistical Association (IISA) organized jointly by the International Indian Statistical Association and the Indian Institute of Science, Bengaluru, December 26-30, 2022.
4. **Farha Sultana** delivered a talk titled "On Two Exponential Populations under Joint Adaptive Type-II Progressive Censoring" on the Global Summit on Sustainable Science and Technology (GS3T 2022) organized by Adamas University, Kolkata, September 15-16, 2022.



**Collaboration with International Institutions:**

Farha Sultana	Publication	Bingöl Universities, Bingöl, Turkey	Turkey	2 completed and 4 ongoing
	Publication	The High Institute for Tourism and computer, Alexandria, Egypt	Egypt	1 completed and 1 ongoing
	Publication	Shahrekord University, Shahrekord, Iran	Iran	1 ongoing
	Publication	The University of Jordan, Amman, Jordan	Jordan	1 completed and 2 ongoing

# Department of Humanities & Social Sciences

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## Faculty:

1. Dr. Suranjana Barua, Assoc. Professor, Sociolinguistics, Discourse/Conversation Analysis, English Language Teaching, Translation Studies, Gender Studies.
2. Dr. Hari K. Choudhury, Asst. Professor, Issues related to Development Economics, Health Economics and Experimental Economics.
3. Dr. Rajarshi Mitra, Asst. Professor, Colonial and Postcolonial Studies, Colonial Culture, Anglo-Indian novels, Animal Studies, Urban Studies.
4. Dr. L David Lal, Asst. Professor, Politics of Identity, Caste Conflicts, Socio-Political History of Marginalised, Public Policy.
5. Dr. Kaveri Deb, Asst. Professor, International Trade, Development Economics, Applied Econometrics.
6. Dr. Arjab Roy, Asst. Professor, Colonial & Postcolonial Studies, Literature and Cinema, Left Intellectual and Cultural History, Subaltern Studies, Adivasi Studies and Urban Studies.

## Publications:

### Journal:

1. Borah, R.K., Barman, B., and Choudhury, H.K. (2022). Envisioning the financial and psychological hardships of cancer, *Indian Journal of Public Health*, Volume 33 (2022), pp. 190-192.
2. Mitra, Rajarshi (2023). "Vengeance of Pastoral Zombies in 'Kingdom: Flashin of the North (2021)'". *Café Dissensus* (<https://cafedissensus.com/2022/12/30/vengeance-of-pastoral-zombies-in-kingdom-ashin-of-the-north2021/> )
3. Mitra, Rajarshi. "Administering Disseminations: Film Exhibition and Censorship During the Great War in India." *The Journal of Imperial and Commonwealth History* (2023): 1-23. (<https://doi.org/10.1080/03086534.2023.2166389>)
4. Deb, K. 2022. "Trade Structure and Economic Growth in Emerging and Developing Asia: A Dynamic Panel Analysis." *Journal of Quantitative Economics* (Springer), 20 (3): 601-628. (DOI: 10.1007/s40953-022-00298-8).
5. Narzary, D. and Lal, L.D. (2023). 'The Eastern Gate', *Asian Ethnicity*, Vol. 24, No.1, pp. Routledge: Taylor and Francis, DOI: 10.1080/14631369.2023.2182275
6. Lal, L.D. (2022). 'The Politics of Repressed Guilt: The Tragedy of Austrian Silence', *The Historical Dialogues*, September 2022. (<http://historicaldialogues.org/2022/09/08/claudia-leebe-the-politics-of-repressed-guilt-the-tragedy-of-austrian-silence-9-september-2022/>)



7. Lal, L.D. (2022). 'A Complex Interplay Between Past and Present: Reordering Adivasi Worlds: Representation, Resistance, Memory', The Book Review, Vol. 46, No. 5, pp.11-13  
(<https://www.thebookreviewindia.org/a-complex-interplay-between-past-and-present/>)

### **Book Chapters:**

1. Barua, Suranjana (2022). 'Politeness and Language'. In R.K.Agnihotri and Rajesh Kumar (Eds.) Language, Mind and Society: A Language and Education Reader. Orient Blackswan. Pp. 217-238.

### **Editorial:**

1. Barua, Suranjana Member of Editorial Committee of the journal Language and Language Teaching (ISSN 2277-307X) Vol. 11, No 2; Issue 22 July 2022 and Vol 12, No. 1, Issue 23, January 2023 <http://llt.org.in/editorial-committee/>.

### **Invited Talks/Lectures:**

1. Mitra, Rajarshi. Delivered online lecture on 'The Maharajah's Sphere of Influence: Hunting, Statecraft and Imperial Friendships in Princely Cooch Behar' on November 26, 2022, at the Department of Comparative Indian Language and Literature, University of Calcutta.
2. L David Lal invited for a special lecture on 'Historical and Contemporary Anti-Caste Utopias: A Dalit Bahujan Discourse' on Feb 28 2023 organised by Indian Institute of Dalit Studies, Delhi.
3. L David Lal was invited as an expert for a Consultative Meeting to deliberate on 'Health Data Analysis Needs in North-East India' on Feb 10 2023 organised by the Population Council of India.
4. L. David Lal was invited as a resource person for a Workshop on 'Review of Literature' organised by Assam Downtown University, Guwahati on 6 December 2022.
5. L David Lal was invited as a resource person for a Workshop on 'Literature Review' organised by the School of Social Sciences and Humanities, TISS, Guwahati Campus on 11th November 2022
6. L David Lal was invited as an expert consultative meeting of the Nodal Officers of the States and Union Territories for a research study on 'Sustainable Development Goals 4.7: Policies and Practices in School Education' organised by Planning and Monitoring Division, National Council of Educational Research and Training (NCERT), Delhi on 2-5th August, 2022.
7. L David Lal was invited for a consultative meeting on 'Ration Pe Charcha: Situating Public Distribution System in Delhi' organised by NIDAN India on 20th April, 2022.

### **Paper Presentations at National/International Conferences:**

1. Hari K. Choudhury presented a research paper entitled, "Financial interventions and women's participation in a cervical cancer screening program: Evidence from a field experiment", in the "Second Biennial Conference on Development Sustainable Development Goals amidst Multiple Global Shocks: Progress, Challenges and Way Forward", held from December 21 to 23, 2022 at IGIDR, Mumbai
2. Hari K. Choudhury presented a research paper entitled, "Interventions and women's participation in a cervical cancer screening program: Evidence from a field experiment", in the North East Research Conclave, held from May 20 to 22, 2022 at the Indian Institute of Technology Guwahati
3. Narzary, D. and Lal, L.David. (2022). Presented a research paper on 'Tribal Development and its Implementation in BTC: A Study of Kokrajhar District of Assam' organised by CNESPR-Jamia Milia Islamia and Bodoland University on 27 January 2023.
4. Lal, L. David, Presented a research paper on 'Untouchability, Caste and Ayyavazhi Movement of 19th Century Travancore Province' at a Special Panel on Untouchability, Caste and History' held on 27-29 December 2022 organised by the 81st Indian History Congress at MCC Chennai.
5. Lal, L. David. (2022). Presented a research paper on 'Searching AI in a Karbi village: Narrative from the Field' at an International Conference on (Re)constructing the 'self' in the age of AI: Perspectives, Contestations and Challenges, held on 15th -16th December 2022, Galgotias University and Jean Monnet Module-Erasmus Programme of the European Union.
6. Narzary, D. and Lal, L.David. (2022). Presented a research paper on 'Promoting Entrepreneurs among Bodo Women under PM Van Dhan Yojana: A case study of Pachim Maligaon and Jaraguri Van Dhan Vikas Kendra of BTR', at the 14th Annual National Seminar on Challenges and Pathways to Livelihood Enhancement in Rural Communities of India: Cultural and Economic Parameters on 25-27 November 2022.
7. Lal, L. David. (2022). Presented a research paper on 'Gandhi's Social Expansionism in Assam: A Critical Reflection', at National Seminar on Towards Social Equality: Multiple Contexts and Approaches with Special Reference to North East India by Dr. Ambedkar Chair, Tezpur University, Assam on 2&3 November 2022.

### **Research Project:**

1. Mitra, Rajarshi. Co-Principal Investigator, The British Empire, Scotland, and Indian Famines: Writings on Food Crisis in Colonial India, A Royal Society of Edinburgh Research Network Project.
2. L David Lal. State Lead, Konrad-Adenauer-Stiftung Germany (KAS) and Christ University Bangalore Study on Youth Perception on The Rule of Law in India (2022-23).

**Seminar Grant:**

1. L. David Lal has received a sum of Rs.150000/- as a Seminar Grant from the Indian Council of Social Science Research, Ministry of Education, GoI for organising a National Seminar on '*Seventy-five years of independence and the development of Dalits and Tribes in India*'.

**External Reviewer:**

1. L. David Lal. CASTE: A Global Journal on Social Exclusion advances peer-reviewed scholarship by Brandeis University.
2. Suranjana Barua. Scientific Reviewer for the 8th World Conference on Women's Studies (WCWS) 2022. "Feminist Futures in Precarious Times: Decoloniality, Borderlands, and Transformative Visions (12th – 14th May 2022)".

**Session Chair in a conference:**

1. Hari K. Choudhury chaired a technical session at the Second Biennial Conference on Development Sustainable Development Goals amidst Multiple Global Shocks: Progress, Challenges and Way Forward", held from December 21 to 23, 2022 at IGIDR, Mumbai

**Article in English Newspaper:**

1. Hari K. Choudhury and Bhavana Barman, "Let's finish the battle against cervical cancer", The Assam Tribune, November 10, 2022

**Training:**

1. Suranjana Barua completed Recurrent Training for Interlocutors, Aviation English Language Experts (Raters) and Aviation English Trainers organized by Airports Authority of India from 15 October- 18 October, 2022.
2. Suranjana Barua completed one-day district level orientation cum training for External Evaluators of Gunotsav, 2022 (under Axom Sarba Siksha Abhijan, Kamrup; Govt. of Assam) on 18.5.2022.

**Organizer:**

1. Arjab Roy. Organized a talk by Prof. V. Raju Nayak, on "Negotiating Madness and Methods: Challenges in Selecting Disciplines in Research", Department of Humanities and Social Sciences, Indian Institute of Information Technology Guwahati. (4 November, 2022)
2. Rajarshi Mitra. Organized the Second conference on The British Empire and Colonial Famines: History, Culture, Critique at the Indian Institute of Information Technology Guwahati. (7 & 8 January, 2023)

## **Construction and Campus Development**

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The Govt. of Assam allocated Rs. 10 crores to the Institute in their 2022-23 budget. We are thankful to the Govt. of Assam for this grant. The grant enabled us to take up the construction of more hostel rooms. The addition of 104 boys' hostel seats and 30 girls' seats is nearing completion. Sports facilities are being strengthened with the addition of courts for basketball, tennis, volleyball, and badminton (2 courts each). A students' activities centre is also nearing completion which will provide space for extra-curricular students' activities, and which will also have a gym. A town hall with a stage and seating space which is covered with a roof but open on the sides, is almost ready. This will make holding of students' programmes easier. Other additions include a canteen near the admin building. More classrooms will be added in 2023-24.

## Students' Activities

With a view to hone students' talents in extra-curricular activities, IIIT Guwahati facilitates students with a number of clubs under Students' Gymkhana Council. The Clubs are, Programming Club, Robotics Club, Google Developer Student Club and Mavericks- The Machine Learning Society (Under Technical Board); Literary Club, Movie Club, Music Club, Fine Arts Club, Quiz Club, Reading Club, Photography Club, Dance Club and Drama Club (Under Cultural Board); Indoor Sports Club and Outdoor Sports Club (Under Sports Board) and Eco and Outreach Club, Health Club and Girls' Empowerment Group (Under Welfare Board).

Various events conducted by 18 Clubs under different Boards are given below:

### Technical Board

Programming Club	
Date	Events
01.08.2022 – 31.08.2022	Instagram Quizzes
20.08.2022	Don't Quit #2
21.08.2022	Don't Quit #3
31.08.2022	Don't Quit #4
01.10.2022 – 31.10.2022	Instagram Quizzes
22.10.2022	Code IIITG 6.1
01.12.2022 – 31.12.2022	Instagram Quizzes
10.12.2022	Open Source and Its Opportunities
11.12.2022	Introduction to Programming Club
Robotics Club	
30.08.2022	ROS for Firebird VI and Swarm Robotics
Mavericks – The Machine Learning Society	
21.08.2022	Workflow of ML
28.10.2022	Intuition and maths behind Linear Regression

### Cultural Board

Literary Club		
Date	Events	Details of Events
10.08.2022	Declamation	It was organised by Literary Club under Cultural Board of IIITG.
15.08.2022	Independence Day: Poetry and Speech	A poetry and speech competition on Independence Movement was organised by Literary Club under Cultural Board of IIITG on Independence Day.

29.09.2022	Recipe Formulation Competition on Traditional Recipes of Millets	It was organised by Literary Club under Cultural Board of IIITG under the "Celebration of International Year of Millets-2023".
21.10.2022	Festivities	It was organised by Literary Club under Cultural Board of IIITG. Under Festivities, "AD-MAD SHOW" and "Heartthrob" were organised.
31.10.2022	Exhibition on Sardar Vallabhbhai Patel's life	It was organised by Literary Club under Cultural Board of IIITG for the celebration of "Unity Day".
31.10.2022	Speech on the Life of Sardar Vallabhbhai Patel's Life	It was organised by the Literary Club under the Cultural Board of IIITG for the celebration of "Unity Day".
15.11.2022	Speech Competition – Contribution of Janajatiya Heroes in Freedom Struggle	A speech competition was organised on "Janajatiya Gourav Diwas" to commemorate the 146 <sup>th</sup> birth anniversary of Birsa Munda. It was organised by Literary Club under Cultural Board of IIITG under EBSB.
29.12.2022	War of Words (Online Debate)	A debate competition on the topic "Is United Nation actually effective! Seeing the present scenario in Afghanistan and Ukraine" was organised by the Literary Club under Cultural Board of IIITG.
28.01.2023	Open Mic 2.0	It was organised by Literary Club under Cultural Board of IIITG during "Entropy", the Techno – fest of IIITG.
3.02.2023 – 5.02.2023	Parliamentary Debate	4 students of IIITG have participated in the Parliamentary Debate in Alcheringa, the annual cultural festival of IIT Guwahati.
04.03.2023 – 05.03.2023	Model United Nations	Literary Club under Cultural Board of IIITG conducted the first edition of MODEL UNITED NATIONS during YUVAAN 2023.
11.03.2023	Panel Discussion	It was an evening of thought provoking discussion on the topic of "A fulfilling life – have a well-paying career, pursue a passion/hobby, contribute to the nation". Mr. Bhargav Bharali (Founder – WISSEN MONK) and Mr. Nilotpall Gohain (Civil Servant and author) were the panellist.
31.03.2023	Slogan Writing Competition	A slogan writing competition on the topic "Water Conservation" was conducted under "Jal Shakti Abhiyan" by the Literary Club under Cultural Board of IIITG.
<b>Movie Club</b>		
<b>Date</b>	<b>Events</b>	
28.05.2022	Indian Premier League (IPL) Final 2022 Streaming	

26.08.2022	Movie Screening	
<b>Music Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
15.08.2022	Independence Day	The 76 <sup>th</sup> Independence Day at IIITG was held with great fervour of Patriotism. The main theme of the event focused on Azadi Ka Amrit Mahotsav. Selected persons by Music Club under Cultural Board of IIITG performed various performances – “The Unsung Anthem”, “A Message of Peace”, “The Universal Message of Unity in Diversity” and “Loving India i.e., Bharat”
08.08.2022	Har Ghar Tiranga	“Har Ghar Tiranga” campaign under the aegis of Azadi Ka Amrit Mahotsav has been organised by Music Club under Cultural Board of IIITG to encourage people to bring the Tiranga home and to host it to mark the 75 <sup>th</sup> year of India's Independence.
15.09.2022	Swachhata Pakhwada	It was organised by Music Club under Cultural Board in collaboration with Welfare Board of IIITG.
21.10.2022	NADOPASANA Season 1	The “IIITG Indian Music Guild – RAGA” under Music Club presented its first seasonal concert “NADOPASANA – Worship through Sound – Season 1” in IIITG ground.
21.10.2022	EUPHORIA Season 1	The “IIITG Global Music Guild – Rhythm” under Music Club presented its first seasonal concert “EUPHORIA – Drift into Music – Season 1” in IIITG ground.
24.10.2022	Digital Initiatives	Music Club under Cultural Board of IIITG started its all new set of digital engagements with IIITG Community.
26.10.2022	Music Quiz	It was organised by Music Club in collaboration with Quiz Club under Cultural Board of IIITG.
27.10.2022	“Assam Rajasthan Jugalbandi” Music Program	It was organised by Music Club under Cultural Board of IIITG under EBSB.
31.10.2022	National Unity Day	Music Club under Cultural Board of IIITG presented patriotic songs on the life of Sardar Vallabhbhai Patel.
04.01.2023 – 08.01.2023	36 <sup>th</sup> North East Zone Youth Festival “YUVA PRATIBHA”	IIIT Guwahati and its Music Club under Cultural Board nominated 9 student contingent to participate at the “YUVA PRATIBHA” held in University of Science and Technology Meghalaya (USTM).



14.01.2023	Anthem Writing	It was organised by Music Club under Cultural Board for IIIT Guwahati anthem and Cultural Fest "YUVAAN" anthem.
15.01.2023	Makar Sankranti Celebration	Music Club under Cultural Board of IIITG initiated the Makara Ganotsavam – songs on Harvest Festival event.
26.01.2023	Republic Day	Music Club under Cultural Board of IIITG performed National Song "Vande Mataram" and a patriotic song "Ae Watan" during the celebration of 74 <sup>th</sup> Republic Day at IIIT Guwahati.
28.01.2023	Entropy	Various club members under different boards performed at the Tech Fest "Entropy" Musical Night as per the invitation of Music Club under Cultural Board of IIITG.
29.01.2023	Soulvibezz	The "IIITG FUSION GUILD" under Music Club presented its first seasonal concert "Soulvibezz - Mélange of Music- Season 1" in IIITG academic ground.
27.02.2023	Sounds of Bharat	Music Club under Cultural Board of IIITG under the aegis of the Ministry of Education, Govt. of India initiative, conducted the "International Mother Language Day" music program. A one-hour program to popularize and patronize the diverse mother languages of the student community of IIITG through presentation of music and poems in various languages were showcased at the event.
04.03.2023 – 05.03.2023	YUVAAN 2023	Music Club under Cultural Board has performed various activities in "YUVAAN 2023" which is Annual Cultural Fest of IIITG.
<b>Fine Arts Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
21.05.2022	Royalties Competition	It was organised by Fine Arts Club under Cultural Board of IIITG under EBSB. In the event, the participants represented the Qilas and Hawelis of Rajasthan of their choice through their artistic skills.
12.08.2022	VIBGYOR – The Art Competition	It was organised by Fine Arts Club under Cultural Board of IIITG.
01.09.2022	Art Analysis of "The City Rises"	It was organised by Fine Arts Club under Cultural Board of IIITG. It was the second one in the Art Analysis series.
13.09.2022	Rangoli Competition	It was organised by the Fine Arts Club under Cultural Board of IIITG.
21.10.2022	VIBRANCE – Art Relay Competition	It was organised by Fine Arts Club under Cultural Board of IIITG.



21.10.2022	Dandiya Decoration	On the occasion of Festivities, Fine Arts Club under Cultural Board of IIITG decorated the dandiya sticks which were used by the dance participants under the Dance Club.
23.10.2022 – 24.10.2022	Illumination	Fine Arts Club under Cultural Board in collaboration with Eco and Outreach Club under Welfare Board of IIITG organised "Illumination" to celebrate the festival of lights "Diwali" by decorating diyas and lanterns.
31.10.2022	Art Analysis of "The Artifact"	It was organised by the Fine Arts Club under Cultural Board of IIITG. It was the third one in the Art Analysis series.
30.11.2022	Art Analysis of "The Kerala Mural Art"	It was organised by the Fine Arts Club under Cultural Board of IIITG. It was the fourth one in the Art Analysis series.
04.03.2023	Face Painting	It was organised by Fine Arts Club under Cultural Board of IIITG during YUVAAN 2023.
05.03.2023	Comic Strip/Manga making Competition	It was organised by Fine Arts Club under Cultural Board of IIITG during YUVAAN 2023.
31.03.2023	Drop by Drop	It was a poster making competition organised by Fine Arts Club under Cultural Board of IIITG.
<b>Quiz Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
13.04.2022	Quizzathon: The Sports Quiz	It was organised by Quiz Club under Cultural Board of IIITG for all batches except 1 <sup>st</sup> year batch.
30.04.2022	Quizzathon: The Sports Quiz	It was organised by Quiz Club under Cultural Board of IIITG for 1 <sup>st</sup> year batch.
13.08.2022	Saturday Hunt - 1	It was organised by Quiz Club under Cultural Board of IIITG. In the event, 5 questions were posted every Saturday on the Instagram page of Quiz Club.
20.08.2022	Saturday Hunt - 2	It was organised by Quiz Club under Cultural Board of IIITG. In the event, 5 questions were posted every Saturday on the Instagram page of Quiz Club.
30.08.2022	Memes and the Internet Quiz	It was organised by Quiz Club under Cultural Board of IIITG.
03.09.2022	Saturday Hunt - 3	It was organised by Quiz Club under Cultural Board of IIITG. In the event, 5 questions were posted every Saturday on the Instagram page of Quiz Club.
13.10.2022	Millet's Quiz	It was organised by Quiz Club under Cultural Board under the "Celebration of International Year of Millets – 2023".
26.10.2022	Music Quiz	It was organised by Quiz Club under Cultural Board of IIITG.

13.11.2022	Anime Quiz	It was organised by Quiz Club under Cultural Board of IIITG.
15.01.2023	Freshers Quiz	It was a general quiz organised by Quiz Club under Cultural Board of IIITG.
<b>Reading Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
19.04.2022	Rajasthan Ki Baat	It was a general discussion event where students discussed the history, travel experience, different local communities etc. of Rajasthan. It was organised by Reading Club under Cultural Board of IIITG under EBSB.
15.08.2022	Article Writing Competition	An article writing competition on the topic "75 years of India's Independence: Expectations vs Reality" amid "Azadi Ka Amrit Mahotsav" was organised by Reading Club under Cultural Board of IIITG.
29.09.2022	Recipe Formulation Competition	It was organised by Reading Club in collaboration with Literary Club under Cultural Board of IIITG under the "Celebration of International Year of Millets-2023".
15.11.2022	Speech Competition - Contribution of Janajatiya Heroes in Freedom Struggle	A speech competition was organised on "Janajatiya Gourav Diwas" to commemorate the 146 <sup>th</sup> birth anniversary of Birsa Munda. It was organised by Reading Club under Cultural Board of IIITG under EBSB.
<b>Photography Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
05.04.2022	Village Photo Walk	It was organised by Photography Club under Cultural Board of IIITG.
17.05.2022 – 24.05.2022	9+1 Composition Photography Contest	It was organised by Photography Club under Cultural Board of IIITG.
11.02.2023	Photography Contest	It was organised on the theme "Sunrise" by Photography Club under Cultural Board of IIITG.
<b>Dance Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
07.04.2022	Bohagi 2022 (Bihu Celebration)	Bohagi 2022 was conducted on IIITG ground. Various dances were performed. It was organised by Dance Club under Cultural Board of IIITG.
28.05.2022	Offline Dance Club Session	It was organised by Dance Club under Cultural Board of IIITG.
15.08.2022	Invocation Dance Song	It was organised by Dance Club under Cultural Board of IIITG.

30.09.2022	Dance Video for YouTube Song and Instagram Reel	It was organised by Dance Club under Cultural Board of IIITG.
26.01.2023	Dance Performance on Republic Day	Republic Day was celebrated on IIITG ground. Various dances were performed by students on the event. It was organised by Dance Club under Cultural Board of IIITG.
<b>Drama Club</b>		
<b>Date</b>	<b>Events</b>	<b>Details of Events</b>
15.08.2022	Act	An act to portray social issues and their solutions was organised by Drama Club under Cultural Board of IIITG.
15.08.2022	Act	An act for "freedom fighters to show their contribution and how western mentality is affecting our society" was organised by Drama Club under Cultural Board of IIITG.
15.09.2022	Nukkad Natak	A Nukkad Natak named "Realities of our Environment" was performed by Drama Club under Cultural Board of IIITG under the Programme "Swachhta Pakhwada", an initiative by Govt. of India.
21.10.2022	Bollywood Day	It was a competition under an event "FESTIVITIES" in which participants performed some mimicry or dialogue delivery. It was organised by Drama Club under Cultural Board of IIITG.
08.01.2023	Damsharas and Dialogue Delivery Games	It was organised by Drama Club under Cultural Board of IIITG.
05.02.2023	Halla Bol Nukkad Natak	Drama Club under Cultural Board of IIITG participated in a nukkad natak competition "Halla Bol" which was organised by IIT Guwahati in its Annual Cultural Fest "Alcheringa".

### Sports Board

Indoor Sports & Outdoor Sports		
Date	Events	Details of Events
13.10.2022 – 16.10.2022	Participated in SPIRIT 2022 an Annual Sports event held by IIT Guwahati	Many students of IIT Guwahati have participated in the Sports event at IIT Guwahati.
10.11.2022 – 14.11.2022	Cricket Tournament	It was organised by Outdoor Sports Club under Sports Board of IIITG.

10.11.2022 – 14.11.2022	Carrom Tournament	It was organised by Indoor Sports Club under Sports Board of IIITG.
25.02.2023 – 26.02.2023	UMANG	It was organised by Sports Board of IIITG.

### Welfare Board

Eco and Outreach Club		
Date	Events	Details of Events
29.01.2022 – 25.04.2022	"Adopt a tree across India" campaign	It was organised by Eco and Outreach Club under Welfare Board of IIITG. Under the campaign, the participants chose the tree from their immediate surrounding (hostel/home). They took photos of the adopted tree and shared the images with committee.
01.09.2022	Pledge for Swachhta	On the occasion of Swachhta Pakhwada campaign, Eco and Outreach Club under Welfare Board of IIITG organised a pledge taking ceremony for students along with faculty and staff in front of the Academic Building.
04.09.2022	Plastic Collection Drive	On the occasion of Swachhta Pakhwada campaign, Eco and Outreach Club under Welfare Board of IIITG organised a plastic collection drive in the Institute premises.
10.09.2022	Run for Cleanliness	On the occasion of Swachhta Pakhwada campaign, Eco and Outreach Club under Welfare Board of IIITG organised a marathon from Boys Hostel to Academic Building to give a message on cleanliness.
12.09.2022	Plantation Drive	On the occasion of Swachhta Pakhwada campaign, Eco and Outreach Club under Welfare Board of IIITG organised a plantation drive in association with a NGO "Green Chapter". Around 20 samplings were planted near the IIITG lake.
23.10.2022	Illumination	Eco and Outreach Club under Welfare Board in collaboration with Fine Arts Club under Cultural Board of IIITG organised "Illumination" to celebrate the festival of lights "Diwali" by decorating diyas and lanterns.

Health Club		
Date	Events	Details of Events
08.06.2022 – 21.06.2022	International Day of Yoga	On the occasion of International Day of Yoga, Health Club under Welfare Board of IIITG conducted Yoga for 14 days.
14.06.2022	World Blood Donor Day	On the occasion of World Blood Donor Day, Health Club under Welfare Board of IIITG conducted a blood donation awareness campaign.
Girls' Empowerment Group		
Date	Events	Details of Events
15.10.2022	Movie on Women Empowerment	Girls' Empowerment Group under Welfare Board in collaboration with Movie Club under Cultural Board organised a movie night for students of IIITG on the topic "Women Empowerment". Movie "Hidden Figures" was streamed.
31.10.2022	Ignite Insights 1.0	It was a talk organised by Girls' Empowerment Group under Welfare Board of IIITG.
10.12.2022	Introductory Session for Freshers	It was organised by Girls' Empowerment Group under Welfare Board of IIITG.
14.01.2023	Session on "WE" program	"WE" is a two-year gender inclusion program offered by Talentsprint and supported by Google, seeks to balance the gender disparity. It was organised by Girls' Empowerment Group under Welfare Board of IIITG.

### **ANNUAL INSTITUTE AWARDS:**

The Annual Institute Awards is given out every year in three categories which are 1) Best performing Club, 2) Exemplary Hostel Wing and 3) Best Social Initiative. The Exemplary Hostel Wing Award was dropped as most of the students were not in hostels. The awards for "Best Performing Club" and "Best Social Initiative" were presented on 8th April 2022. The details of winner are as follows:

#### **Best Performing Club 2022:**

**Winner:** Programming Club under Technical Board of IIIT Guwahati.

**Club Coordinators:** Aaryan Gupta, Abhinav Kumar, Deepak Kumar, Karuna Sharma, Rituparna, Shivam Kumar Gupta

**Students' Gymkhana Council Member in-Charge:** Mayank Kumar.

**Student Members:** Ishan Acharyya, Patole Rutuja Rajaram, Prakhar Gupta, Amitesh Kumar, Yatn Sanjeev Bangad, Mayank Kumar, Aaryan Gupta, Abhinav Kumar, Deepak Kumar, Karuna Sharma, Rituparna, Shivam Kumar Gupta, Akkala Harish Goud, Rajiv Choudhury, Talika Gupta, Aayush Baramecha, Naman Singh Nayal, Aman Verma, Rishabh Dev.

### **Best Social Initiative 2022:**

**Winner:** Prayatn (Eco and Outreach Club) under Welfare Board of IIIT Guwahati.

**Club Coordinators:** Himanshu Kumar, Prateek Arora.

**Students' Gymkhana Council Member in-Charge:** Indrajit Kalita

**Student Members:** Indrajit Kalita, Prateek Arora, Himanshu Kumar, Shivangi Prasad, Suraj Kumar, Satanu Maity, Anand Shankar, Atiquzzaman Mondal, Harsh Gupta, Ankit Choudhary, Chirag Rastogi, Ravi Prakash Verma, Sanket Kuanar, Vaishnav Narayan Tompey, Aman Rao, Aastik Gaur, Nisheet Karan, Pushpanjali Nema, Srineela Baireddy, Ashmit Jaiswal, Laxita Sodhani, Anushka Bansal, Navneet Verma.

## **INSTITUTE FESTIVALS**

### **Entropy 2022:**

Entropy 2022, the first annual technical fest of IIIT Guwahati, was held on January 28-29, 2023, at the IIITG campus. The fest provided a platform for students to showcase their technical skills and knowledge through various competitions and events. In addition to technical events, the fest featured cultural events organized by the Cultural Board of IIITG. The fest received overwhelming participation and support from sponsors, making it a grand success. Following are the details about the technical events that made the fest vibrant.

- **Code Thrill:** Code Thrill was a nationwide coding competition. It attracted 74 individual participants who competed against each other to showcase their coding prowess. The competition offered a total cash prize of INR 32.5K, motivating participants to give their best.
- **Valo-Jods:** Valo-Jods was a nationwide e-sport competition featuring the game Valorant. It involved eight teams, each consisting of five members. The event attracted highly skilled gamers who battled it out for the total cash prize of INR 22.5K. The competitive spirit was high, and the event proved to be a thrilling experience for both participants and spectators.
- **Tech Quiz:** Tech Quiz was a closed event exclusively for IIITG students. A total of 55 teams, with three members each, participated in this technical quiz competition. It tested participants' knowledge in various technical domains, allowing them to showcase their expertise. The event offered a cash prize of INR 15K, making it an engaging and rewarding experience for the participants.
- **Tech Sure Hunt:** Tech Sure Hunt was a closed event limited to IIITG students. It involved a treasure hunt with technical clues, challenging participants' problem-solving and teamwork abilities. Eighty-two teams, each comprising five members, took part in the search. The event offered a cash prize of INR 10K, adding to the excitement and competitiveness.
- **Research Colloquium:** The Research Colloquium provided a platform for primarily IIITG PhD and MTech students to present their research through



poster sessions. A total of 12 entries were showcased during the one-hour session, allowing participants to share their findings and insights with the academic community.

The technical events of Entropy 2022 witnessed a remarkable participation of 701 individuals, including five external participants. The fest offered attractive prizes worth over 2.5 lakh rupees, including an impressive cash prize of INR 80K. The generous rewards motivated participants to perform their best and added to the overall excitement and competitiveness of the event.

Entropy 2022 received valuable support from sponsors and partners. The fest's title sponsor and technical partner was Innovation, demonstrating their commitment to promoting technical excellence. Shradha Automobiles joined as the co-title sponsor, contributing to the event's success. Hyderabad Kitchen served as the food partner, ensuring participants had a delightful culinary experience throughout the fest. Miracle was the style partner, adding a touch of elegance to the event. SwagLok served as the merch partner, helping provide t-shirts as merchandise. Notice Bard acted as the media partner, ensuring adequate coverage and promotion of the fest. Other sponsors included Taskade, Rosenfeld, and Interview Buddy, who contributed to the overall success and smooth execution of Entropy 2022.

In addition to the technical events, the Cultural Board of IIITG organized cultural events on January 28-29, 2023, from 5:30 pm to 9:00 pm. The cultural events offered diverse performances and activities, allowing participants to showcase their artistic talents and cultural heritage.

Entropy 2022, the first annual technical fest of IIIT Guwahati, was a resounding success. The fest provided a platform for students to exhibit their technical skills and knowledge through various competitions and events. The fest exceeded expectations with an impressive number of participants and valuable support from sponsors and partners. The cultural events organized by the Cultural Board of IIITG added a vibrant and diverse element to the overall experience. Entropy 2022 set a high standard for future editions and established itself as a prominent event in the technical and cultural landscape of IIIT Guwahati.

### **YUVAAN 2023:**

Yuvaan 2023, Annual Cultural Fest of IIITG, was a two-day long festive extravaganza, held on the 4th and 5th of March 2023 at the IIITG campus in Tech City, Bongaigaon. One of the significant cultural festivals of Northeast India, the theme of this year's festival was "Sunrise," which showcased the dawn of North East India in Global Cultural spheres. The festival aimed to celebrate the cultural diversity of the North East in general and bring together students from different parts of the state. Participants from all over Assam attended the fest and witnessed multiple events and competitions.

The festival included more than ten events such as Dance, Music, Debate, Face Painting etc. It had more than twenty competitions, pro-shows, informal activities, and highly anticipated cultural prizes. Model United Nations was one of the

highlights of Yuvaan 2023. It had more than 60 participants from other educational institutions. EDM sensations DJ Bickx, The Malkauns Band, and North East Cultural troops from Sualkuchi performed at the festival. To further the scale of Yuvaan and the delight of its participants, it also had special talks by highly eminent speakers and a workshop on photography by Canon. Yuvaan is the manifestation of the very spirit that IIITG fosters, i.e. it is the expression of creative excellence and technical prowess. It is also a jubilant celebration of cultural diversity and creative richness. From art to music to dance to writing – Yuvaan presented a diverse platform for every creative soul could ask for, and even more.

Yuvaan'23 was supported financially by Oil India Ltd. in association with the State Bank of India, Assam Petrochemical Ltd. The event is widely covered by various media channels such as G Plus and exclusively covered by PRAG NEWS. The festival was partnered with the Central Bureau of Communication Regional Office Guwahati where they provided artists from Sualkuchi who showcased the diverse cultural performances of Assam. North East Handicrafts and Handlooms Development Corporation was the gifting partner and Allay Guwahati supported the musical evening. Wissen Monk, Swaglok, Shaikh Brothers, 4Aces Retail Private Limited, Royal Enfield and Edit Beauty Salon were the other partners.

## **STUDENTS' ACHIEVEMENTS**

IIIT Guwahati students have at National and International level earned a name both in academic as well as extra-curricular activities outside the Institute. Some such achievements are listed below:

### **Academic achievements**

1. Bhanupriya Saha, Roll Number: 2102009 from M.Tech (CSE) 2021 - 2023 Batch was Microsoft Certified as Azure Fundamentals Professional, on 4th May 2022.
2. Raghunath Saha, Roll Number: 2102034 from M.Tech (CSE) 2021 - 2023 Batch was Microsoft Certified as Azure Fundamentals Professional, on 4th May 2022.

### **Extra-curricular Achievements**

1. Ashutosh Pandey (Roll No: 2101046) from CSE branch has won the Best Delegate award in MODEL UNITED NATIONS organised at IIT Guwahati during their Annual Cultural Festival-ALCHERINGA, held from 3rd-5th February 2023. He also won 3rd Position in "TWIST A TALE (Online Story Writing Event) held on 2nd April 2022 by IIT Mandi. He also won the Best Delegate award in the International Republic Model United Nations held on 1st May 2022.
2. Talika Gupta (Roll No: 2001197) has won the second prize in the Lady Ada Programming Competition. ACM India organized this event at BITS Pilani, Hyderabad. It was held from 7th to 8th October 2022.



3. Under the team mentor V. Kethareswaran, a PhD Scholar (Roll No: 2103034) in the Department of Computer Science and Engineering, Indian Institute of Information Technology Guwahati (IIITG) team Hex Clan has won the UNESCO India Africa Hackathon 2022 with a total team prize of Rupees Three Lakhs. UNESCO and the Ministry of Education (Govt. of India), jointly conducted the event. The Honourable Vice President of India and Minister for Education (Govt. of India) presented the award to Mr V. Kethareswaran on November 25, 2022. The team addressed a problem statement under "Decision Support System for Electric Vehicles Adoption
4. Aman Jain (Roll No: 1901018), Nikhil Mishra (Roll No: 1901120), and Nimish Agarwal (passed out student); a group of three IIIT Guwahati students secured the 17th rank in the ICPC Gwalior-Pune 2021 Regional Round and the 49th rank in the ICPC Amritapuri 2021 Regional Round. It was held on 4th October 2022.
5. The Cricket Team of IIIT Guwahati won the 2nd Place in the Cricket Tournament held at IIT Guwahati from 13th – 16th October 2022 during their Annual Sports festival SPIRIT. IIIT Guwahati Team was captained by Areeb Md Sarim, Roll No: 2001036 of CSE branch.
6. Ayushman Singh Chauhan (Roll No: 1901049) from CSE branch was selected as one of the undergraduate participants for Google's Research Week, 2023; held in Bengaluru from 29th to 31st January 2023.
7. Mayank Gupta (Roll No-2101117) took part in Northeast Hackathon 2023 of Northeast Startup Festival 2023 and his team won the 3rd prize. The team name was 'Ctrl Alt Del' and he was the team captain. Rest of the 3 members of the team were from GUIST.

#### **Details of Scholarship for the Year 2022-23:**

<b>Scholarship Schemes</b>	<b>Number of Students benefitted</b>
Central Sector Scholarship for Top Class Education for SC Students	10
Central Sector Scholarship Scheme of National Fellowship and Scholarship for Higher Education for ST Students	9
Mukhyamantri Medhavi Vidyarthi Yojna (MMVY)	1

<b>Amount Range (Per Annum)</b>	<b>Number of Students</b>
Up to ₹1 Lakh	Nil
₹1 Lakh - ₹2 Lakh	Nil
₹2 Lakh & Above	20

# TRAINING AND PLACEMENT

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IIIT Guwahati had a fairly successful placement session this year. The companies where our students have been placed include: Amazon (Both International and Domestic), Atlassian, Trilogy, ServiceNow, Gainsight, Western Digital (Sandisk), Dell Technologies, Goldman Sachs, Morgan Stanley, PWC, ZS Associates, Tekion, Gameskraft, Zscaler, Zuora, Publicis Sapient, Juspay, Legato Healthcare, Versa Network, Ubisoft, MAQ Software etc. The statistics so far are as given below:

## Placement Status B.Tech 2022-23 Batch:

Category	CSE	ECE	Overall
Total number of students attended the placement drives	139	56	195
Total job offered	148	43	190
Average salary	16.5 LPA (approx..)	10.5 LPA (approx.)	15 LPA
Median salary	14.5 LPA	10 LPA	14 LPA
Total students selected so far	125	40	165
Highest salary	120 LPA	32 LPA	120 LPA
Percentage placed so far	89.93%	71.43%	84.62%

## Placement Status M.Tech 2022-23 Batch:

Category	CSE	ECE	Overall
Total number of students attended the placement drives	22	12	34
Total job offered	11	3	14
Average salary	11.8 LPA (approx.)	7.3 LPA (approx.)	11.0 LPA (approx.)
Median salary	10.0 LPA	8.5 LPA	10.0 LPA
Total students selected so far	11	2	13
Highest salary	18.8 LPA	11 LPA	18.8 LPA
Percentage placed so far	50.00%	16.67%	38.24%

[LPA – lakhs per annum]

## **Officers and Other Functionaries of the Institute:**

<b><u>Name</u></b>	<b><u>Designation</u></b>
Prof. Gautam Barua	Director
Mr. Uttam Ch. Das	Registrar
Dr. Ferdous Ahmed Barbhuiya	Associate Dean, Administration
Dr. Bidisha Dasgupta	Associate Dean, External Relations
Dr. Rakesh Matam	Associate Dean, R&D
Dr. Suranjana Barua	Associate Dean, Students' Affairs
Dr. Surajit Panja	Associate Dean, Academic Affairs - UG
Dr. Gautam Kalita	Associate Dean, Academic Affairs - PG
Dr. Subhasish Dhal	Head of the Deptt. of CSE
Dr. Shovan Barma	Head of the Deptt. of ECE
Dr. Dipendu Maity	Head of the Deptt. of Sc. & Maths.
Dr. Rajarshi Mitra	Head of the Deptt. of HSS
Dr. Sumit Mishra	Warden, Boys' Hostel
Dr. Soumi Chattopadhyay	Warden, Girls' Hostel
Dr. Parashjyoti Borah	Associate Warden, Boys' Hostel
Dr. Shyamal Ghosh	Associate Warden, Boys' Hostel
Dr. Debashree Devi	Associate Warden, Girls' Hostel
Dr. Bijit Kumar Das	Placement in-charge
Dr. Sanjay Moulik	Associate Placement in-charge
Dr. Komal Janghel	Library Coordinator
Dr. Pallav Barua	Superintending Engineer/Estate Officer
Mr. Mriganka Dutta Saikia	Assistant Registrar, Finance & Accounts

## **Staff of the Institute:**

<b><u>Name</u></b>	<b><u>Designation</u></b>
Mr. Gagan Chandra Talukdar	Library Information Officer
Ms. Richa Bismitter	Library Information Officer
Ms. Sweety Tamuli	Senior Superintendent
Mr. Dinamoni Borah	Senior Superintendent

Mr. Bhaskar Jyoti Borah	Senior Superintendent
Mr. Churchill R Marak	Senior Superintendent
Mr. Nayanjyoti Baishya	Senior Superintendent
Mr. Navajit Kalita	Senior Superintendent
Mr. Birabrata Seal	Senior Technical Superintendent
Mr. Prasenjit Deka	Senior Technical Superintendent
Mr. Kishore Kumar Das	Senior Technical Superintendent
Mr. HIRAK Jyoti Nath	Senior Technical Superintendent
Mr. Ratul Goswami	Junior Accounts Officer
Mr. Arup Borah	Junior Technical Superintendent
Mr. Raushan Kumar	Junior Technical Superintendent
Mr. Nabadeep Gogoi	Junior Assistant
Mr. Injamul Hussain	Junior Assistant
Mr. Amit Kumar Sharma	Junior Assistant
Mr. Madhurjya Das	Junior Assistant
Mr. Dibash Das	Junior Assistant
Mr. Samar Jyoti Nath	Junior Assistant
Ms. Priyanka Mandal	Junior Assistant
Ms. Supriya Dutta	Junior Assistant
Mr. Rupam Sharma	Junior Assistant
Mr. Utpal Boro	Junior Assistant

## Budget and Expenditure Summary

The Budget and expenditure summary for the year are as follows:

Item	Recurring/Revenue (₹)	Non-Recurring/Capital (₹)
Balance B/F from 2021-22	Nil	Nil
Grant in Aid 2022-23	Nil	Nil
Internal Revenue Generated 2022-23	24,92,78,257.00	Nil
Expenditure 2022-23	24,08,23,290.54	5,59,20,015.00
Balance C/F to 2023-24	84,54,966.46	Nil

Sources of Funds (including balance brought forward)

Item	Recurring/Revenue (₹)	Non-recurring/Capital (₹)
Govt. of India	Nil	Nil
Govt. of Assam	Nil	Nil
Industry partners	Nil	Nil
Income from Interest	13,07,148.00	Nil
Income from fees and Others	24,79,71,108.82	Nil

A summary of the Annual Accounts is given in the Appendix.

## APPENDIX

### A Summary of the Annual Accounts 2022-23

BALANCE SHEET			
		[Amount in ₹]	
SOURCES OF FUNDS	Schedule	Current Year	Previous Year
CORPUS/CAPITAL FUND	1	1,35,33,17,246.26	1,32,27,39,396.14
DESIGNATED/ EARMARKED / ENDOWMENT FUNDS	2	-	-
CURRENT LIABILITIES & PROVISIONS	3	13,17,80,231.07	3,82,30,734.77
TOTAL		1,48,50,97,477.33	1,36,09,70,130.91
APPLICATION OF FUNDS	Schedule		
FIXED ASSETS	4		
Tangible Assets		1,26,56,19,533.32	1,28,82,58,429.79
Intangible Assets		14,18,867.00	9,39,573.00
Capital Works-In-Progress		4,57,63,242.00	37,36,657.00
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5		
Long Term		-	-
Short Term		-	-
INVESTMENTS - OTHERS	6	-	-
CURRENT ASSETS	7	14,85,67,739.28	5,12,34,253.98
LOANS, ADVANCES & DEPOSITS	8	2,37,28,095.73	1,68,01,217.14
TOTAL		1,48,50,97,477.33	1,36,09,70,130.91

INCOME AND EXPENDITURE ACCOUNT			
		[Amount in ₹]	
Particulars	Schedule	Current Year	Previous Year
<b>INCOME</b>			
Academic Receipts	9	24,47,68,365.80	19,22,62,134.01
Grants / Subsidies	10	-	-
Income from investments	11	13,07,148.00	8,38,231.00
Interest earned	12	-	-
Other Income	13	32,02,743.02	21,07,364.50
Prior Period Income	14	-	-
<b>TOTAL (A)</b>		<b>24,92,78,257.00</b>	<b>19,52,07,729.51</b>
<b>EXPENDITURE</b>			
Staff Payments & Benefits (Establishment expenses)	15	18,71,61,301.54	11,72,24,814.16
Academic Expenses	16	1,29,39,429.92	85,85,944.00
Administrative and General Expenses	17	2,37,61,973.79	2,07,85,068.00
Transportation Expenses	18	1,22,830.00	1,34,913.00
Repairs & Maintenance	19	1,66,72,382.00	1,33,95,394.00
Finance costs	20	1,01,477.29	50,921.59
Depreciation	4	3,35,95,176.00	3,71,48,462.00
Other Expenses	21	63,896.00	27,379.00
Prior Period Expenses	22	-	3,06,781.00
<b>TOTAL (B)</b>		<b>27,44,18,467.00</b>	<b>19,76,59,676.75</b>
Balance being excess of Income over Expenditure (A-B)		<b>(2,51,40,210.00)</b>	<b>(24,51,947.24)</b>
Transfer to / from Designated Fund			
Building fund			
Others - Excess depreciation charged in the previous year	4	-	21,49,861.00
<b>Balance Being Surplus / (Deficit) Carried to Capital Fund</b>		<b>(2,51,40,210.00)</b>	<b>(3,02,086.24)</b>

RECEIPTS AND PAYMENTS ACCOUNT							
				Amount in Rupees			
RECEIPTS		Current Year	Previous Year		PAYMENTS	Current Year	Previous Year
I.	Opening Balance			I.	Expenses		
	a) Cash Balances	13,468.00	63,500.00		a) Establishment Expenses	18,71,61,301.54	11,72,24,814.16
	b) Bank Balance				b) Academic Expenses	1,29,39,429.92	85,85,944.00
	i. In Current accounts	27,28,473.17	20,00,253.00		c) Administrative Expenses	2,37,61,973.79	1,94,02,068.00
	ii. In Deposit accounts	4,81,40,000.00	2,20,00,000.00		d) Transportation Expenses	1,22,830.00	1,34,913.00
	iii. Savings accounts	-27,86,915.19	64,58,632.00		e) Repairs & Maintenance	1,66,72,382.00	1,47,78,394.00
II.	Grants Received			II.	f) Prior period expenses	-	3,06,781.00
	a) From Government of India	10,00,00,000.00			g) Finance Cost	1,01,477.29	50,921.59
	b) From State Government	-	-		Payments against Earmarked/ Endowment Funds	-	-
	c) From Industry Partners	-	-		III.	Payments against Sponsored Projects/Schemes	1,34,56,337.31
				IV.	Payments against Sponsored Fellowships/Scholarships	-	
				V.	Investments and Deposits made		
III.	Academic Receipts	24,47,68,365.80	19,22,62,134.01		a) Out of Earmarked/Endowments funds	-	
IV.	Receipts against Earmarked/ Endowment Funds	-			b) Out of own funds (Investments- Others}	-	
V.	Receipts against Sponsored Projects/Schemes	1,25,46,413.00	91,16,930.00	VI.	Term Deposits with Scheduled Banks	-	
VI.	Receipts against sponsored Fellowships and Scholarships	-		VII.	Expenditure on Fixed Assets and Capital Works - in- Progress		
VII.	Income on Investments from				a) Fixed Assets	76,98,917.53	41,80,390.71
	a) Earmarked/Endowment funds	-			b) Capital Works-in- Progress	4,57,63,242.00	37,36,657.00
	b) Other investments	-		VIII.	Other Payments including statutory payments	-	
VIII.	Interest received on						
	a) Bank Deposits	13,22,278.00	9,65,330.26	IX.	Refunds of Grants		
	b) Loans and Advances			X.	Deposits and Advances	4,71,73,181.99	3,72,45,517.67
	c) Savings Bank Accounts	-		XI.	Other Payments	-	



IX.	Investments encashed	-		XII.	<b>Closing balances</b>		
X.	Term Deposits with Scheduled Banks encashed	-			a) Cash in hand	55,924.00	13,468.00
XI.	Other income (including Prior Period Income)	32,02,743.02	21,07,364.50		b) Bank balances		
XII.	Deposits and Advances	9,34,58,149.27	3,49,02,238.51		In Current Accounts	25,65,761.10	27,28,473.17
XIII.	Miscellaneous Receipts including Statutory Receipts	-			In Savings Accounts	-16,66,238.19	-27,86,915.19
XIV	Any Other Receipts - Capital Work in Progress refund	-			In Deposit Accounts	14,05,01,000.00	4,31,40,000.00
					in Flexi Fixed Deposit	70,85,455.00	81,28,507.00
<b>TOTAL</b>		<b>50,33,92,975.00</b>	<b>26,98,76,382.00</b>		<b>TOTAL</b>	<b>50,33,92,975.00</b>	<b>26,98,76,382.00</b>

## Picture Gallery

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**Entropy 2022, the first annual technical fest of IIIT Guwahati**



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**Yuvaan 2023, Annual Cultural Fest of IIIT Guwahati**



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**Yuvaan 2023, Annual Cultural Fest of IIIT Guwahati**



**2<sup>nd</sup> Boys' Hostel under construction**



**2<sup>nd</sup> Boys' Hostel under construction**





**Girls' Hostel extension under construction**



**Students' Activity Centre under construction**



**Town Hall under construction**



**Football Ground under construction**

# LABORATORY FACILITIES



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