# Aliah University

# Academic Audit Department of CSE

The Academic Audit process of Aliah University focuses on four key functional areas:

- 1. Academic Management
- 2. Academic Practices
- 3. Infrastructure and supportive facilities
- 4. Initiatives and Supplementation



# Aliah University

### **Academic Audit**

### Department of Computer Science and Engineering

(Session 2022-23)

Dr. Abhishek Das

Dr. Sk Md Mosaddek Hossain

Dr. Ayatullah Faruk Mollah

Dr. Saiyed Umer

Zafar Sharif

Dr. Nashreen Nesa

Dr. Sk Md Obaidullah

Sk Golam Sarowar Hossain

Moch adra

, Dr. Tapas Bhadra

Dr. Md Azharuddin

Dr. Moumita Chatterjee

Dr. Sumanta Ray

Dr. Souvik Sengupta

Dr. Zeenat Rehena

Dr. Khondekar Lutful Hassan

Mrs. Amina Khatun

Mr. Ahsan Mullick

### Minutes of Departmental Committee Meeting Department of Computer Science & Engineering, Aliah University Date: 02.12.21, 1:00 PM Venue: CSE HoD Room

#### Members Present

1	Dr. Souvik Sengupta	HoD, Chairman
1		Member
2	Dr. Abhishek Das	66
3	Dr. Sk Md Obaidullah	
4	Sk Md Mosaddek Hossain	55
5	Sk Golam Sarowar Hossain	
6	Dr. Zeenat Rehena	
7	Dr. Ayatullah Faruk Mollah	
8	Dr. Sumanta Ray	
9	Dr. Tapas Bhadra	"
10	Mr. Khondekar Lutful Hassan	
11	Dr. Saiyed Umer	
12	Dr. Md Azharuddin	
13	Mrs. Amina Khatun	
14	Mrs. Moumitá Chatterjee	ζζ
15	Mr. Zafar Sarif	• • • • • • • • • • • • • • • • • • • •
16	Mr. Ahsan Mullick	
17	Dr. Nashreen Nesa	

Agenda:

- Constitution of Departmental Academic Audit Committee 1.
- 2. Misc (if any)

Resolution of the Meeting:

- 1. It is decided that all the faculty members of the department should be a member of the departmental academic audit committee
- 2. The departmental academic audit report should be prepared and signed within Aug-Sept of

each year Souvik Sengupta

Dr. Sk Md Mg

Dr. Ayatullah Faruk Mollah

Mr. Khondekar Lutful Hassan

Amina officialis

Mrs. Amina Khatun

6 himick 02/12/2021 Mr. Ahsan Mullick

Dr. Abhishek Das

Sk Golam Sarowar Hossain

Dr. Sumanta Roy

Junou man

Dr. Saiyed Umer

Mrs. Moumita Chatterjee

wesa . 2/12/21 Dr. Nashreen Nesa

Rehero 02.12.21 Dr. Zeenat Rehena

Whadra 02.12.21 Dr. Tapas Bhadra

Dr. Md Azharuddin



# Aliah University

### **Academic Audit**

(Session 2022-23)



The Academic Audit process of Aliah University focuses on four key functional areas:

- 1. Academic Management
- 2. Academic Practices
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#### Information about HOD

1] Name: Dr. Abhishek Das

2] Designation: Associate Professor

3] Qualification: Ph.D , M.S. (USA), B.Tech

4] Teaching experience (in years): 17

5] Industry experience (if any in years): 1

6] Number of teaching hours per week: 20

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet): pls see enclosure

8] Contribution to enrich quality of teaching-learning during the academic year:

(Seminars/Workshops/lectures/field visit sorganized): pls see enclosure

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
AICTE Affairs Committee, AU	Chairman	AICTE Approval and Ministry directives
Internal Quality Assurance Cell (IQAC)	Member	CAS for Faculty
NAAC Committee, AU	Member	Inclusion of NAAC for AU
Sports Committee, AU	Member	Sports organised

10] Other responsibilities (Please specify, add rows if required):

1	Associate Editor, Microsystem Technologies Journal, Springer Natur SCI Indexed, I.F 2.27
2	6 Patents filed

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	Google Classroom online repository for class lectures and materials	
2	Assignments submitted online	

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#### **Annexure**

#### 7. Publications

- 1. Samit Bhanja, Santanu Metia and **Abhishek Das**, "A Hybrid Neuro-Fuzzy Prediction System with Butterfly Optimization Algorithm for PM2.5 Forecasting" **Microsystem Technologies**, Springer Nature, (SCI Indexed I.F.- 2.276 ) , 2022 <a href="https://doi.org/10.1007/s00542-022-05252-5">https://doi.org/10.1007/s00542-022-05252-5</a>
- 2. Samit Bhanja, Santanu Metia and **Abhishek Das**, "A Black Swan Events based Hybrid Model for Indian Stock Markets' Trends Prediction", Innovations in Systems and Software Engineering (a **NASA** Journal) Springer Nature, **Emerging SCI**, I.F.-1.02, 2022 <a href="https://doi.org/10.1007/s11334-021-00428-0">https://doi.org/10.1007/s11334-021-00428-0</a>
- 3. Sanjoy Mondal and **Abhishek Das**, "Energy efficient and secure healthcare data transmission in the Internet of Medical Things Network" **Microsystem Technologies**, Springer Nature, (SCI Indexed I.F.- 2.276) pp 1-13, 2022 <a href="https://doi.org/10.1007/s00542-022-05398-2">https://doi.org/10.1007/s00542-022-05398-2</a>
- 4. Sanjoy Mondal, **Abhishek** crowd sensing environment" **Microsystem Technologies**, Springer Nature, (SCI Indexed I.F.- 2.276), 2022 <a href="https://doi.org/10.1007/s00542-022-05271-2">https://doi.org/10.1007/s00542-022-05271-2</a>
- 5. Samit Bhanja and **Abhishek Das** "A Smart City Air Quality Data Imputation Method using Markov Weights-Based Fuzzy Transfer Learning" **IETE Journal of Research**, Taylor & Francis, (**SCI** Indexed **I.F.- 2.33**), **2023** <a href="https://doi.org/10.1080/03772063.2023.2186500">https://doi.org/10.1080/03772063.2023.2186500</a>
- Mehboob Zahedi and Abhishek Das, "UN Sustainable Development Goals: Cybernetics as a Goal directed Platform", Third Concept, Vol. 36 No. 432 pp 116-120, ISSN 0970-7247, Feb 2023 (UGC Care Journal).
- 7. H. N. Khan, Abhishek Das, A. Chaudhuri, "Unique Video Encryption Technique Intended for Smart City Application" IETE Journal of Research, Taylor & Francis, (SCI Indexed I.F.- 2.33), 2023 https://doi.org/10.1080/03772063.2023.2190543
- 8. Sandipan Roy, Samit Bhanja, **Abhishek Das**, "AndyWar: A Intelligent Android Malware Detection using Machine Learning", Innovations in Systems and Software Engineering, (A NASA Journal), Springer Nature, (Emerging SCI, I.F.-1.02), 2023 <a href="https://doi.org/10.1007/s11334-023-00530-5">https://doi.org/10.1007/s11334-023-00530-5</a>
- Sanjoy Mondal, Abhishek Das, "Quality Aware Cost Efficient Reward mechanism in Mobile Crowdsensing System with Uncertainty Constraints", Microsystem Technologies, Springer Nature, (SCI Indexed, I.F.- 2.276), 2023 <a href="https://doi.org/10.1007/s00542-023-05495-w">https://doi.org/10.1007/s00542-023-05495-w</a>
- 10. Mehboob Zahedi, Samit Bhanja, **Abhishek Das** "Novel Machine Learning Techniques for Diabetes Prediction", Book Entitled "Intelligent Human Centered Computing "Part of the Springer Tracts in Human-Centered Computing book series (STHCC), 2023 <a href="https://doi.org/10.1007/978-981-99-3478-2">https://doi.org/10.1007/978-981-99-3478-2</a> 24

Patents published:

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- 1) **India Patent** published on "Machine Learning based Prediction and Diagnosis of various heart diseases", #202211000653
- 2) **India Patent** published on "Artificial Intelligence based early detection strategy for Chronic Kidney Disease", #202241001019
- 3) **India Patent** published on "Internet of Things based real-time Attendance System by using Facial -Recognition technology", #202141059478
- 4) **India Patent** published on "Deep Learning based Pulmonary- Function- Distortion tracing in smokers and post Covid Patients", #202241006232
- 5) **India Patent** published on "Machine Learning based Personality prediction system and Big 5 Personality Traits" #202221000835
- 6) India Patent published on "IOT, ML, Big Data based Smart Agriculture for predicting Water requirement, live temperature and humidity monitoring in Agriculture Sector "#202221008737

### 8. Seminars/Workshops/lectures organized:

Conferences/ Workshops organised:

1. General Chair at 11th International Conference on Computing, Communication and Sensor Networks, CCSN2022 at Utkal University, Odisha

2. Organizing Chair at 9th International Conference on Microelectronics, Circuits and Systems. Micro2022 Conference Dates: 25th and 26th of June 2022 at Jaipur, Rajasthan

3. Program Co-Chair at 2nd International Conference on Network Security and Blockchain Technology (ICNSBT 2023) at Vidyasagar University, Midnapore organised by Computer Society for India, Kolkata Chapter.

4. Program Co-Chair at Doctoral Symposium on Human Cantered Computing (Human - 2023

) at Kolkata organised by Computer Society for India, Kolkata Chapter.

5. General Chair at 12th International Conference on Computing, Communication and Sensor Networks, CCSN2023 on 15th October 2023 at Mumbai.

#### Lectures given:

- 1) Invited Speaker on "Can Technology reduce the Gender Biasness" at the Seminar on International Woman's Day by Dept. of Nursing, Aliah University, Kolkata on 8 Mar 2022.
- 2) Session Chair in the 7th International Conference on Emerging Applications of Information Technology (EAIT 2022) organised by CSI Kolkata in March 2022
- 3) Session Chair at the 1st International Conference Human-Centric Smart Computing (ICHCSC 2022) on April 2022
- 4) Delivered **Keynote Talk** address on "**Transforming Healthcare with Internet of Medical Things (IoMT)**" at the 3rd International Conference on Computational Intelligence & IoT (ICCIIoT) on 24th Feb 2023 organised by **NERIST** and **NIT Mizoram**.
- 5) Session Chair at the Doctoral Symposium on Human Cantered Computing HUMAN23 on 25th Feb 2023 at Techno India University organised by Computer Society of India.
- 6) Session Chair at the 2nd International Conference on Network Security and Blockchain (Technology (ICNSBT 2023)

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- 7) Delivered **Keynote Talk** at 5th **IEEE** International Conference on "Devices for Integrated Circuits (DevIC 2023) at Kalyani Government Engineering College on 8th April 2023.
- 8) Session Chair at International Conference on Microelectronics Circuits & Systems, Micro 2023 on 2nd July, 2023.
- 9) Session Chair at International Conference on Human-Centric Smart Computing ICHCSC 2023 on 6th July, 2023.

Dept. of Computersity, Kolkata

1] Name: Sk Md Obaidullah

2] Designation: Associate Professor

3] Qualification: PhD

4] Teaching experience (in years): 14 Years+

5] Industry experience (if any in years): 2 Years

6] Number of teaching hours per week: 14

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet): 01 Project, 15 Publications

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Computer Network	Chairman	Maintenance of AU LAN
Website maintenance	Member	Performed assigned duties
IQAC	Member	Performed assigned duties
BOS, Mathematics AU	Member	Performed assigned duties
BOS, Management AU	Member	Performed assigned duties
Purchase, MEN, AU	Member	Performed assigned duties

10] Other responsibilities (Please specify, add rows if required):

1	
2	

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	
1	
2	
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1] Name: Dr. Souvik Sengupta

2] Designation: Associate Professor

3] Qualification: PhD (Tech)

4] Teaching experience (in years): 17 Years

5] Industry experience (if any in years): NA

6] Number of teaching hours per week: 20

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet):

- Mukherjee, N., & Sengupta, S. (2022). Comparing different preprocessing techniques for the classification tasks in diabetic retinopathy from fundus images. In *Proceedings of International Conference on Advanced Computing Applications: ICACA 2021* (pp. 601-612). Springer Singapore.
- 2. Sengupta, S. (2022). Possibilities and challenges of online education in India during the COVID-19 pandemic. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 17(4), 1-11.
- 3. Mukherjee, N., & Sengupta, S. (2022). In Search for the Optimal Preprocessing Technique for Deep Learning-Based Diabetic Retinopathy Stage Classification from Retinal Fundus Images. In *Artificial Intelligence Technologies for Computational Biology* (pp. 161-176). CRC Press.
- 4. Bhadra, S. R., & Sengupta, S. (2023, January). A Review on Machine Learning and Deep Learning Based Approaches in Detection and Grading of Alzheimer's Disease. In *International Conference on Computational Intelligence in Communications and Business Analytics* (pp. 1-13). Cham: Springer Nature Switzerland.
- 5. Sengupta, S. (2023). Towards Finding a Minimal Set of Features for Predicting Students' Performance Using Educational Data Mining. *IJ Modern Education and Computer Science*, *3*(1), 44-54.
- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars / Workshops / lectures / field visits organized):
- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
ERP Committee (University)	Chairman	Preparing SRS, Selection of Vendor, Installing and execution of ERP at the University
All Departmental Committee	Chairman	Head of the Department
Technical Committee for Online Classes (University)	Joint Coordinator	Implementing G-Suite for the University
NAAC committee	Coordinator	Preparing departmental

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(Department)		data and reports for
Exam committee (department)	Member	NAAC All the examinations and admission related matters
Purchase committee (department)	Member	Departmental purchase related issues
Doctoral committee (department)	Member	Doctoral admission, coursework and other activities

10] Other responsibilities (Please specify, add rows if required):

2	

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	Developing multi-media based learning materials, laboratory manuals for different courses taught during the different semesters.
2	Interactive sessions with students.



1] Name: Dr. Sk Md Mosaddek Hossain

2] Designation: Assistant Professor

3] Qualification: Ph.D. (Engg.), M.Tech (Computer Science and Engineering)

4] Teaching experience (in years): 15 + years

5] Industry experience (if any in years): NIL

6] Number of teaching hours per week: 24 hours +

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet):

#### A. Journal Papers Published

### B. Conference Papers Published

- [1] Lutfunnesa Khatun, **Sk Md Mosaddek Hossain**\*, Sumanta Ray, Anirban Mukhopadhyay: "Classifying breast invasive carcinoma subtypes: A feature selection-based machine learning approach", [IEEE] ODICON-2022; DOI: 10.1109/ODICON54453.2022.10010242, Electronic ISBN: 978-1-6654-7839-7.
- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

1	Attended One Week Online Faculty Development Programme (FDP) on
	"IoT Induced Artificial Intelligence for Emerging Computing Paradigms"
	organised by Dr B R Ambedkar National Institute of Technology, Jalandhar during 04-08 October, 2022.

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	
Common Engineering Curriculum Committee	Member	Updating Engineering depts. curriculum and syllabus according to latest AICTE/UGC guidelines.  Preparing class routine of all the courses run by CSE department since 2011.	
2. Time Table Committee	Coordinator		
3. Departmental Purchase Committee	Member	Purchase related activities of the department.	
4. Syllabus Enrichment	Member	Any matters related to syllabus and curriculum	

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5. Departmental NAAC Core Committee:	Member	Deal with all NAAC related departmental data processing department for upcoming NAAC evaluation process.
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### 10] Other responsibilities (Please specify, add rows if required):

1	Career counselling
2	Remedial classes
3	Member of Doctoral Research Committee
4	Checked and verified students' Semester Grade Cards for various courses
5	Reviewer for several prestigious journals like
	DNA and Cell Biology (indexed in SCI/SCIE), Impact Factor: 3.311.
	IEEE/ACM Transactions on Computational Biology and Bioinformatics (TCBB: indexed in SCI/SCIE), Impact Factor: 3.71.
	IEEE Access (indexed in SCI/SCIE), Impact Factor: 3.367.
	IEEE Transactions on Emerging Topics in Computational Intelligence (indexed in SCI/SCIE), Impact Factor: 8.28.
	INAE Letters (Editorial Team Member).
6	Reviewer for the conferences
7	Member of International Association of Computer Science and Information Technology (IACSIT).
	Member of International Association of Engineers (IAENG).
	Member of Institute of Research Engineers and Doctors (the IRED).
	Member of International Computer Science and Engineering Society (ICSES).

# 11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	Research Guidance to the following M.Tech students:  A. Md Washim Akram
2	Setting Question Papers for End-Term Theory Examinations
3	Performed invigilation duty at End-Term Theory Examinations
4	Conducted Practical Examinations
5	Conducted Project Presentation & Viva Voce
6	Conducted Grand Viva Evaluation
7	Conducted Seminar Presentation
8	Evaluated Answer Scripts
9	Updated Courses/Curriculum Design
10	Prepared and Updated Syllabus for B.Tech., M.Tech., BCA and MCA programmes
11	Conducted several Lectures, Practicals, and Projects for the students
12	Projects Guidance for B.Tech, MCA students

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1] Name: SK GOLAM SAROWAR HOSSAIN

2] Designation: ASSISTANT PROFESSOR

3] Qualification: M.Tech

4] Teaching experience (in years): 18

5] Industry experience (if any in years): NIL.

6] Number of teaching hours per week: 23

7] Number of Research Projects/Publications/ Study material developed during

The academic year (provide list in separate sheet):

ONE CONFERENCE PUBLICATION

8] Contribution to enrich quality of teaching-learning during the academic year:

(Seminars/Workshops/lectures/fieldvisitsorganized): **WORKSHOP** 

ONE SEMINAR, ONE

9] Contributiontothegrowthanddevelopmentofthe Universityduringthe academic year:

Committee	Position held	Work done/ Activity	
HMC	WARDEN	Maintaining the student database, solving the day to day problems of the boarder etc.  Design the curriculum and syllabus  Collecting the budgetary quotation and prepare the detailed documentation for purchase process.	
BoS	Member		
Purchase Committee	Member		
Departmental Routine Committee	Member	Prepare Time Table	

Dept of Computer iv. Kolkata

### 10] Other responsibilities (Please specify, add rows if required):

1	Purchase committee member of Department of Chemistry	
2	Act as an external examiner/ observer of different examination	
3	Guiding UG and PG Students in their projects	

# 11] BestPracticesinteaching&academic-administrationintroducedinthedepartmentinthe academic year (Please specify, add rows if required):

1	ICT
2	Brainstorming, Class test, Hands on activities for better understanding of the subject.
3	Provide the study material beforehand so that student can go through the lecture with ease.

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1] Name: Zeenat Rehena

2] Designation: Assistant Professor

3] Qualification: PhD (Engg)

4] Teaching experience (in years):12 years

5] Industry experience (if any in years):1 year

6] Number of teaching hours per week: 😂 24

7] Number of Research Projects/Publications/ Study material developed during the academic year (provide list in separate sheet): 05 (Annexure Attached)

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized): Organized a Seminar for Students

1. Organized a One Day Workshop on "Recent Trends in IoT and its Applications" by Department of CSE, Aliah University, Newtown campus on 20th February, 2023.

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
1. AICTE	Chairperson	All matters related to AICTE
2. ICC	Convener	To address the issues of sexual harassment
3. Central Routine Committee	Member	Allocation of time table for common subjects
4. Examination Rules Committee	Member	Formation of examination rules
5. Environment and Energy Committee	Member	To ensure awareness among al about conservation environment and natural resources
6. IIC	Member	To deal with innovation and entrepreneurship related activities such as ideation, Problem solving, Design Thinking, IPR, project handling and management.
7. NAAC	Departmental Coordinator	All matters related to NAAC
8. Time-Table Committee	Member, Departmental	All issues related to subject allocation and time table creation

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10]	Other responsibilities	(Please	specify,	add	rows	if required	1):
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11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

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#### Annexure

Publications: (2022-23)

- B Ghose, Z Rehena, L Anthopoulos, A Deep Learning based Air Quality Prediction Technique Using Influencing Pollutants of Neighboring Locations in Smart City, Journal of Universal Computer Science, 2022.
- 2. MA Mondal, Z Rehena, Stacked LSTM for short-term traffic flow prediction using multivariate time series dataset, Arabian Journal for Science and Engineering, 2022
- 3. MA Mondal, Z Rehena, Priority-based adaptive traffic signal control system for smart cities, SN Computer Science, 2022.
- 4. A Hossain, S Mondal, Z Rehena, Determining k-partitions of Mobile WSN ensuring one-hop communication with total coverage, IEEE Calcutta Conference (CALCON), 2022.
- 5. Md Ashifuddin Mondal, Zeenat Rehena, Designing of A\* based route recommendation service for multimodal transportation system in smart cities, Iranian Journal of Science and Technology, Transactions of Civil Engineering, Feb 2023.

Dept of Computersity, Kolketa

1] Name: Ayatullah Faruk Mollah

2] Designation: Assistant Professor

3] Qualification: PhD (Engg)

4] Teaching experience (in years): 9 Years

5] Industry experience (if any in years): 2 Years

6] Number of teaching hours per week: 18-22 hours

7] Number of Research Projects/Publications/ Study material developed during the academic year (provide list in separate sheet): Annexure A

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized): Annexure B

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Institute Induction Program Cell	Chairman	Students Induction Program conducted
Common Engineering Curriculum Framework Committee	Member	As required from time to time
Common Timetable Committee	Member	As required from time to time
University Foundation Day Committee	Member	As required from time to time
Registration Committee for Convocation	Convener	As required from time to time
Board of Studies, Dept. of Electronics & Communication Engineering	Member	As required from time to time
Departmental Research Committee, ECE Dept.	Member	As required from time to time
Purchase Committee, ECE Dept	Member	As required from time to time
Board of Studies, CSE Dept.	Member	As required from time to time
NAAC, UGC, AICTE Related Activity	Member	As required from time to time
NAAC Core Committee, Dept. of CSE, Aliah University	Member	As required from time to time
Syllabus Enrichment Committee, CSE Dept	Member	As required from time to time
Doctoral Scrutiny Committee of Sk. Golam Sarowar Hossain, CSE Dept.	Member	As required from time to time
Departmental Research Committee,	Member	As required from time

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CSE Dept.		to time	
eminar, Workshop, Invited alk etc. Committee	Convener	As required from time to time	
Purchase Committee, CSE Dept	Member	As required from time to time	

10] Other responsibilities (Please specify, add rows if required):

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11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

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#### Annexure A

Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet)

#### Research Projects

NA

#### **Publications**

- [1] K. Sengupta, M. Denkiewicz, T. Szczepińska, A. F. Mollah, Y. Ruan, R. D'Souza and D. Plewczynski, "Multiscale phase separation by explosive percolation at the single chromatin loop resolution", *Computational and Structural Biotechnology Journal*, vol. 20, pp. 3591-3603, Jul 2, 2022 [IF: 6.15, SCIE, Scopus, DBLP, UGC].
- [2] E. Asad, A. Islam, A. Alam and A. F. Mollah, "Univariate feature fitness measures for classification problems: An empirical assessment", In: M. A. Jabbar et al. (Eds): Applied Machine Learning and Data Analytics, Springer, Communications in Computer and Information Science (CCIS), vol. 1818, pp. 13-26, May 27, 2023, ISBN: 978-3-031-34221-9.
- [3] S. Khan and A. F. Mollah, "Wheat-head detection from outdoor wheat field images using YOLOv5", In: P. Dutta et al. (Eds): Emerging Technologies in Data Mining and Information Security, Springer, Lecture Notes in Networks and Systems (LNNS), vol. 490, pp. 535-542, Sep 16, 2022, ISBN: 978-981-19-4051-4.
- [4] N. Chakraborty, A. F. Mollah, S. Basu and R. Sarkar, "An hour-glass CNN for language identification of Indic texts in digital images", In: B. Raman et al. (Eds): Computer Vision and Image Processing, Springer, Communications in Computer and Information Science (CCIS), vol. 1568, pp. 26–35, Jul 24, 2022, ISBN: 978-3-031-11349-9.

Study material developed NA

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#### Annexure B

Contribution to enrich quality of teaching-learning during the academic year: (Seminars / Workshops / lectures / field visits organized)

- a. Organizer, Seminar on **Career Opportunities in Canada for Engineering Graduates**, Dept. of CSE, Aliah University, India, June 12, 2023.
- b. TPC Member, International Conference on Computational Intelligence (ICCI-2022), organized by IIIT Pune during Dec 29-30, 2022.
- c. TPC Member, International Conference on Computer Vision & Image Processing (CVIP-2022), organized by Visvesvaraya National Institute of Technology, Nagpur during Nov 4-6, 2022.
- d. Tutorial Chair, International Conference on Data, Electronics and Computing (ICDEC-2022), organized by Department of Electronics and Communication Engineering & Department of Computer Applications, North-Eastern Hill University, Shillong, India during Sep 7-9, 2022.
- e. Co-chair, Computer Science Track, IEEE Calcutta Conference (CALCON), Dec 10-11, 2022.

Dept of Computer by Kolkala

1] Name: Dr. Tapas Bhadra

2] Designation: Assistant Professor

3] Qualification: Ph.D. (Engg.)

4] Teaching experience (in years): 8 yrs 3 months

5] Industry experience (if any in years): 1 year

6] Number of teaching hours per week: 24 hours

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet):

#### A. Journal Papers Published

- 1. Tapas Bhadra and Ujjwal Maulik, "Unsupervised Feature Selection Using Iterative Shrinking and Expansion Algorithm. IEEE Transactions on Emerging Topics in Computational Intelligence", vol. 6, no. 6, pp.1453-1462, 2022.
- 2. Saurav Mallik, Soumita Seth, Amalendu Si, Tapas Bhadra, and Zhongming Zhao, "Optimal ranking and directional signature classification using the integral strategy of multi-objective optimization-based association rule mining of multi-omics data", Frontiers in Bioinformatics, vol. 3, pp. 1182176, 2023.
- 3. Atikul Islam, Soumita Seth, **Tapas Bhadra**, Saurav Mallik, Arup Roy, Aimin Li, and Manash Sarkar, "Feature Selection, Clustering and IoMT on Biomedical Engineering for COVID-19 Pandemic: A Comprehensive Review", Journal of Data Science and Intelligent Systems, 2023.

### **B.** Conference Papers Published

1. A Kairi, **Tapas Bhadra**,S Bhattacharya, A Roy,T Saha, M Samanta, "Analysis Of Dna Cryptography's Improvements for The Modeling of Secured Corpus" In International Conference On Computational Applied Sciences & It's Applications (ICCASA 2023).

8] Contribution to enrich quality of teaching-learning During the academic year:

Dept of Computer Sty, Kolkala

Attended Two weeks Faculty Development Program (FDP) on Advanced Pedagogy organised by NITTR, Kolkata during 19-30 June, 2023.

## 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Examination and Admission	Coordinator/	All the examinations and
	Convener	admission related matters
NAAC, UGC, AICTE, Affairs	Member	All the NAAC, UGC, AICTE related activity.
Doctoral Research Committee	Member	Doctoral admission and activity
Syllabus Enrichment	Member	Any matters related to syllabus and curriculum
Purchase	Member	Any matters related to purchases

### 10] Other responsibilities (Please specify, add rows if required):

1	Career counselling
2	Remedial classes
3	Member of Doctoral Scrutiny Committee for several Research Scholars
4	Checked and verified students' Semester Grade Cards for various courses
5	Reviewer for several prestigious journals
6	Reviewer for the conferences

# 11] BestPracticesinteaching&academic-administrationintroducedinthedepartmentinthe academic year (Please specify, add rows if required):

1	Research Guidance to the following M.Tech students:  A. Julfikar Sk (M.Tech.)	
2	Setting Question Papers for End-Term Theory Examinations	
3	Performed invigilation duty at End-Term Theory Examinations	
4	Conducted Practical Examinations	
5	Conducted Project Presentation & Viva Voce	
6	Conducted Grand Viva Evaluation	
7	Conducted Seminar Presentation	
8	Evaluated Answer Scripts	

HEAD SC & English School

1] Name: Dr. Khondekar Lutful Hassan

2] Designation: Assistant Professor

3] Qualification: Ph.D. (Engg)

4] Teaching experience (in years): 8 Years

5] Industry experience (if any in years): NiL

6] Number of teaching hours per week: 24 hour

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet):

#### a. Journal Papers Published

 Hassan, Khondekar Lutful; Mandal, Jyotsna kumar "Composite Attribute Based Ad-hoc On Demand Multipath Distance Vector Routing Protocol (CAB-AOMDV)" Journal of Scientific & Industrial Research. Vol 79, No 4, DOI: 10.56042/jsir.v79i4.68667.

#### b. Conference Papers Published

- 1. Datta, A., Hassan, K.L., Kundu, K. (2023). Rule-Based Investigation on Positive Change in Air Quality at Kolkata During Lockdown Period Due to Covid-19 Pandemic. In: Bhattacharyya, S., Banerjee, J.S., De, D., Mahmud, M. (eds) Intelligent Human Centered Computing. Human 2023. Springer Tracts in Human-Centered Computing. Springer, Singapore. https://doi.org/10.1007/978-981-99-3478-2 19
- 8] Contribution to enriching quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):
- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Project Allocation	Coordinator	Assign Supervisor to all BTech, BCA, MCA and MTech students



NAAC, UGC, AICTE,	Member	All the All A Co. Line
fairs		All the NAAC, UGC,
Doctoral Research		AICTE related activity.
Committee	Member Member	Doctoral admission and activity
Syllabus Enrichment		
Synabus Enrichment		Any matters related to
		syllabus and
		curriculum

### 10] Other responsibilities (Please specify, add rows if required):

1	Career counselling
2	Remedial classes
3	Member of Doctoral Scrutiny Committee for several Research Scholars
4	Checked and verified students' Semester Grade Cards for various courses
5	Reviewer for several prestigious journals
	Reviewer for several Conference

# 11] BestPracticesinteaching&academic-administrationintroducedinthedepartmentinthe academic year (Please specify, add rows if required):

1	Research Guidance to the following M.Tech students:  A. Moinuddin	
2	Setting Question Papers for End-Term Theory Examinations	
3	Performed invigilation duty at End-Term Theory Examinations	
4	Conducted Practical Examinations	
5	Conducted Project Presentation & Viva Voce	
6	Conducted Grand Viva Evaluation	
7	Conducted Seminar Presentation	
8	Evaluated Answer Scripts	



1] Name: Dr. SAIYED UMER

2] Designation: Assistant Professor Stage 1

3] Qualification: Ph.D.

4] Teaching experience (in years): 5 years

5] Industry experience (if any in years): 0

6] Number of teaching hours per week:

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet):

### Number of Research Projects: One (01)

 Being the Project Investigator of Approved Grant for the Project title "Design and Development of Agriculture-Artificial Intelligence Based Techniques for Saffron Production in India" of the amount in Rupees: 20,40,240/- by DST iHub - AWaDH (Agriculture & Water Technology Development Hub)} INDIAN INSTITUTE OF TECHNOLOGY ROPAR RUPNAGAR - 140 001, PUNJAB, INDIA.

### Journal Paper Publication:

- 1. Anay Ghosh, Bibhas Chandra Dhara, Chiara Pero, Saiyed Umer, "A multimodal sentiment analysis system for recognizing person aggressiveness in pain based on textual and visual information", Journal of Ambient Intelligence and Humanized Computing, Springer. (SCI)
- 2. Sanoar Hossain, Saiyed Umer, Ranjeet Kr Rout, M Tanveer; 'Fine-grained image analysis for facial expression recognition using deep convolutional neural networks with bilinear pooling', Elsevier Applied Soft Computing. (SCI) (IF: 8.263)
- 3. Ranjeet Kumar Rout, Saiyed Umer, Monika Khandelwal, Smitarani Pati, Saurav Mallik, Bunil Kumar Balabantaray, Hong Qin, 'Identification of discriminant features from stationary pattern of nucleotide bases and their application to essential gene classification', Frontiers in Genetics. Frontiers in Genetics. (SCI) (IF: 4.772)
- 4. Chinmay Maiti, Bibhas Chandra Dhara, Saiyed Umer, Vijayan Asari, "An Efficient and Secure Method of Plaintext-based Image Encryption Using Fibonacci and Tribonacci Transformations", IEEE Access, (SCI)
- 5. Saiyed Umer, Alamgir Sardar, Ranjeet Rout, Muhammad Tanveer, Imran Razzak, 'IoT-Enabled Multimodal Biometric Recognition System in Secure Environment', IEEE Internet of Things Journal. (SCI)
- 6. Alamgir Sardar, Saiyed Umer, Ranjeet Kumar Rout, Chiara Pero; 'Face Recognition System With Hybrid Template Protection Scheme For Cyber-Physical-Social Services', Elsevier Pattern Recognition Letters. (SCI)

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7. Saiyed Umer, Ranjeet Kumar Rout, 'Descriptive and inferential analysis of features for Dysphonia and Dysarthria Parkinson's disease symptoms', Health Services and Outcomes Research Methodology, Springer. (Scopus)

### **Conference Paper Publication:**

- Shabbir, Nazir, Ranjeet Kr Rout, Saiyed Umer, and Partha Pratim Mohanta. "Fine-Grained Attribute-Object Feature Representation in Compositional Zero-Shot Learning." In International Conference on Pattern Recognition and Machine Intelligence, pp. 157-165. Cham: Springer Nature Switzerland, 2023.
- 2. Dwivedi, Gaurav, Monika Khandelwal, Ranjeet Rout, Saiyed Umer, Saurav Mallik, and Hong Qin. "RMSxAI: Arginine methylation sites prediction from protein sequences using Machine Learning algorithms and explainable ArtificialIntelligence." (2023).
- 3. Krishana, Shivam, Monika Khandelwal, Ranjeet Kumar Rout, and Saiyed Umer. "Harnessing the Power of Machine Learning Algorithms for Landslide Susceptibility Prediction." In International Conference on MAchine inTelligence for Research & Innovations, pp. 95-104. Singapore: Springer Nature Singapore, 2023.
- 4. Ali, Akbar, Ranjeet Kumar Rout, and Saiyed Umer. "Descriptive Predictive Model for Parkinson's Disease Analysis." In Computational Intelligence: Select Proceedings of InCITe 2022, pp. 105-118. Singapore: Springer Nature Singapore, 2023.

#### **Patent Publication:**

- Khan, Muhammad Khurram, Saiyed Umer, Ranjeet Kumar Rout, and Alamgir Sardar. "Systems and methods for facilitating biometric recognition." U.S. Patent 11,762,969, issued September 19, 2023.
- 8. Contribution to enrich the quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

1	Setting Question Papers for the End-Term Theory Exam.
2	Performed invigilation duty at End-Term Theory Exam.
3	Conducting Practical Exam.
1	Conducting Project Presentation & Viva Voce
5	Conducting Grand Viva Evaluation
5	Conducting Seminar Presentation
7	Evaluating Answer Scripts
3	Updating of Courses/Curriculum Design
)	Use of ICT or Computer-aided methods – ppt
0	Taking and conducting several Lectures, Practical, and Projects for the students



9. Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work dans/ A -t' 't
Departmental Examination Committee	Member	Work done/ Activity  Managing all the semester
Departmental Board of studies	Member	Examinations
Departmental Research Committee (DRC)	Member	Work done Work done
Syllabus Enrichment Committee	Member	Work done
Departmental Examination Committee	Member	Work done
Central Maintenance Committee	Member	Work done
Central AICTE Committee	Convener	Work done
Central Computer Network Committee	Convener	Work done
Central Hostel Management Committee	Vice-Chairman	Work completed
Departmental M.Tech Course	Coordinator	Work ongoing

10. Other responsibilities (Please specify, add rows if required):

1	Remedial Classes	
2	Career counseling	
3	Member of Doctoral Scrutiny Committee for several Research Scholars	
4	Checked and verified students' Semester Grade Cards for various courses	

11. Best Practices in Teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1.	Tarik Uzzaman (M.Tech. 2022): Gene expression Analysis in Saffron
	Genome, Duration: June 01, 2021 to May 31, 2022, held at Department of CSE, Aliah University, Newtown, Kolkata.

Dest of Compulsisity, Kolkera

1] Name: DR. MD AZHARUDDIN

2] Designation: Assistant Professor

3] Qualification: PhD

4] Teaching experience (in years): 7

5] Industry experience (if any in years): Nil

6] Number of teaching hours per week: 16 hrs

- 7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet): 2 conferences
- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized): Nil
- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
a) Member of Departmental Research Committee (DRC)	Convener	Conduct various research related activity
b) Member of Departmental Board of studies c) Member of Syllabus Enrichment Committee d) Member of Departmental Examination Committee e) Member of Central Maintenance Committee f) Member of Central Examination Committee g) Member of Committee of Software Evaluation from CoE office, AU h) Member of Board of Studies, CSE department, AU	Members	

10] Other responsibilities (Please specify, add rows if required):

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11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

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1] Name: AMINA KHATUN

2] Designation: ASSISTANT PROFESSOR IN CSE

3] Qualification: M.TECH

4] Teaching experience (in years): 8

5] Industry experience (if any in years): 3.9

6] Number of teaching hours per week: 20

### 7] Student's Project in 2022-2023:

SL NO.	Student's Name	Roll No.	Course Name	Project Title	
1	Mohobul Hoque	CSE212006	M.TECH	Remote Health Monitoring System using IoT and ML	
2	Kaifa Sultana	CSE203002	B.TECH	Physiotherapy Management System	
3	Amir Sohail Mallick	CSE203003	B.TECH	Physiotherapy Management System	
4	Abdul Fattah	CSE203004	B.TECH	Physiotherapy Management System	
5	Tanuja Khatun	CSE203007	В.ТЕСН	Physiotherapy Management System	
6	Sk Sahinur Rahaman	BCA203009	BCA	Digital Library System	
7	Sk RiyaJul Islam	BCA203004	BCA	Digital Library System	
8	Sumita Mondal	BCA203003	BCA	Digital Library System	



### 8] Details of seminar/ workshop/Committee Works attended:

- 1. I have completed online Faculty Induction Programme (FIP) organized by the UGC Human Resource Development Centre, Aligarh Muslim University, Aligarh from 8/2/2022 to 12/3/2022.
- I have participated in 5 days workshop on Designing and Modelling of IoT,AI & ML System organized by AICTE, ATAL Academy, Arm Education and STMicroelectronics from August 1<sup>st</sup> to 5<sup>th</sup> 2022.
- 3. Till now I am working as a Member in various events (like organizing quiz competitions, seminar etc) in NDLI Club, Aliah University from 01/10/2021.
- 4. I have participated in organizing One Day Workshop on Recent Trends in IoT and its Applications 20th February, 2023.
- 5. I am working as a member in Hostel Management Committee(HMC) from 22.03.2023.
- 6. I am working as a member in Computer Network Committee (CNC).
- 7. I am working as a BCA Coordinator from February, 2022.
- 8. I am working as a member in AICTE Committee from 22-03-2023.

# 9] Number of Research Projects/Publications/Study material developed during the academic year:

1. I have worked in a book chapter of the following book named "Big Data ComputingAdvances in Technologies, Methodologies, and Applications".

Chapter: Machine Learning in Healthcare Sector and the Biomedical Big Data: Techniques, Applications and Challenges.

Tanvir Habib Sardar, Amina Khatun, Souvik Sengupta, Yusuf Alam, Tabassum Ara



1] Name: Moumita Chatterjee

2] Designation: Assistant Professor

3] Qualification:Ph.D

4] Teaching experience (in years):7

5] Industry experience (if any in years):NA

6] Number of teaching hours per week:24

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet): 3. Separate Sheet Added

8] Contribution to enrich quality of teaching-learning during the academic year:

(Seminars/Workshops/lectures/fieldvisitsorganized):

Organized a One Day Workshop on "Recent Trends in IoT and its Applications" by Department of CSE, Aliah University, Newtown campus on 20th February, 2023.

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Departmental Exam Committee	Member	Exam routine preparation, sitting arrangement preparation, conduct exams
Departmental Routine Committee	Member	Time table preparation
Asset Committee Infrastructure Committee	Coordinator Member	Keeping records of departmental assets.

10] Other responsibilities (Please specify, add rows if required):

1	NAAC, AICTE, UGC Related Activity	
2	Assisting and Anchoring in Student Induction Programme 2022	

OED TIEND CONSTRUCTION CONTROLS

11] BestPracticesinteaching&academic-administrationintroducedinthedepartmentinthe academic year (Please specify, add rows if required):

1	Taking Tutorial and Remedial classes
2	The state of the s

#### **Publications**

- 1. Samanta, P., Kumar, P., Dutta, S., Chatterjee, M., Sarkar, D. (2023), "Depression Detection from Twitter Data Using Two Level Multi-modal Feature Extraction." In: Goswami, S., Barara, I.S., Goje, A., Mohan, C., Bruckstein, A.M. (eds) Data Management, Analytics and Innovation. ICDMAI 2022. Lecture Notes on Data Engineering and Communications Technologies, vol 137. Springer, Singapore. https://doi.org/10.1007/978-981-19-2600-6\_32
- 2. M. Chatterjee, P. Samanta, P. Kumar and D. Sarkar, "Suicide Ideation Detection using Multiple Feature Analysis from Twitter Data," *2022 IEEE Delhi Section Conference (DELCON)*, New Delhi, India, 2022, pp. 1-6, doi: 10.1109/DELCON54057.2022.9753295.
- 3. Kumar, P., Samanta, P., Dutta, S., Chatterjee, M., & Sarkar, D. (2022). "Feature-based depression detection from Twitter data using machine learning techniques." Journal of Scientific Research, 66(2), 220–228.

Dept of Computer by, Kolkata

1] Name: Ahsan Mullick

2] Designation: Assistant Professor

3] Qualification: B.Tech(CSE), M.Tech(CSE)

4] Teaching experience (in years): 10

5] Industry experience (if any in years): N/A

6] Number of teaching hours per week: 22

7] Number of Research Projects/Publications/ Study material developed during The academic year (provide list in separate sheet):

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/fieldvisitsorganized): Organised a 3 weeks AICTE recommended Student Induction Program for all the students of B.Tech 1<sup>st</sup> Year.

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Coordinator of M.C.A	Coordinator	All academic and administrative activities of the program
Asset Marking	Member	Mark all assets in the university
Institute Induction Program Cell	Member	Organised a 2 weeks AICTE recommended Student Induction program for the newly admitted B.Tech students of all streams of the university.

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10] Other responsibilities	(Please specify,	, add rows i	f required):
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11] BestPracticesinteaching&academicadministrationintroducedinthedepartmentinthe academic year (Please specify, add rows if required):

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2	

Dept. of Computersity Kollade

1] Name: Dr. Nashreen Nesa

2] Designation: Assistant Professor

3] Qualification: Ph.D

4] Teaching experience (in years): 4 years

5] Industry experience (if any in years): NIL

6] Number of teaching hours per week: 24

7] Number of Research Projects/Publications/Study material developed during The academic year (provide list in separate sheet): 0

8] Contribution to enrich quality of teaching-learning during the academic year:

(Seminars/Workshops/lectures/field visits organized):

1. Organized a One Day Workshop on "Recent Trends in IoT and its Applications" by Department of CSE, Aliah University, Newtown campus on 20th February, 2023.

9] Contribution to the growth and development to the University during the academic year:

Committee	Position held	Work done/ Activity
NAAC, AICTE, UGC Related activity	Member	Prepared materials related to NAAC assessment.
DRC and PhD Coursework	Member	<ul> <li>Work related to the admission and selection of Ph.D candidates.</li> </ul>
Student club and activity	Member	<ul> <li>Work related to extracurricular activities, student activities.</li> </ul>
B.Tech 1 <sup>st</sup> Year coordinator	Coordinator	<ul> <li>Created google groups and WhatsApp group for the newly admitted students. Monitoring and coordinating the students activities.</li> </ul>
Student Induction Program 2022	Mentor cum Jurist	<ul> <li>Acting as Jurist in Group Discussion of ECE students during their Students Induction program held on November 4, 2022.</li> </ul>
Student	Invited talk	Deliver a talk on "Introduction to

Induction	
Program 2022	Programming" to the newly admitted students on November 9, 2022.
	5, 2022.

10] Other responsibilities (Please specify, add rows if required):

1	
2	

11] Best Practices in teaching & academic administration introduced in the department in the academic year (Please specify, add rows if required):

1	
2	

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1] Name: ZAFAR SARIF

2] Designation: Assistant Professor

3] Qualification: Master of Technology in Computer Science & Engineering

4] Teaching experience (in years): 4years+ (At Aliah University, Kolkata)

& 3years+ (At GEHU, Dehradun)

5] Industry experience (if any in years): NIL

6] Number of teaching hours per week: 23 Lecture hours (Odd Sem)

### & 24 Lecture hours (Even Sem)

- 7] Number of Research Projects/Publications/Study material developed during The academic year (provide list in separate sheet): NIL
- 8] Contribution to enriching the quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized): NIL
- 9] Contribution to the growth and development of the University during the academic year: **2022-23**

Committee	Position held	Work done/Activity
University's Central Training & Placement Committee	Member of Central Committee & Convenor of the CSE Department	Assisting students during placement drives, and monitoring the full process.
Departmental Examination Committee	Member	Exam Schedule preparation, moderation, seating plan, duty assigning everything.

10] Other responsibilities (Please specify, add rows if required):

1	Co-ordinator of BTech (2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> Year)	
2	Departmental Co-ordinator for ERP	
3	Member of Student Club and Activity Committee	
4	Mentor of BTech 3 <sup>rd</sup> year 25 students	
5	Guiding final-year students of UG and PG in Projects and dissertation	

11] Best Practices in teaching & academic administration introduced in the department in the academic year (Please specify, add rows if required):



1] Name: Dr. Sumanta Ray

2] Designation: Assistant Professor

3] Qualification: Ph.D. (Engg.), M.Tech (Computer Science and Engineering)

4] Teaching experience (in years): 9 + years

5] Industry experience (if any in years): NIL

6] Number of teaching hours per week: 24 hours +

7] Number of Research Projects/Publications/

### A. Journal Papers Published

- [1] "Systematic mining of patterns of polysubstance use in a nationwide population survey" S. Ray\*, M. Desai, and S. Pyne, Computers in Biology and Medicine, Volume 151, Part A, December 2022, 106175.
- [2] "Deep variational graph autoencoders for novel host-directed therapy options against COVID-19" S. Ray\*, S. Lall, A. Mukhopadhyay, S. Bandyopadhyay, and A. Schönhuth, Artificial Intelligence in Medicine, Volume 134, December 2022, 102418.
- [3] "A deep integrated framework for predicting SARS-CoV2—Human protein-protein interaction" S. Ray\*, S. Lall, and S. Bandyopadhyay, IEEE Transactions on Emerging Topics in Computational Intelligence, doi: 10.1109/TETCI.2022.3182354., 2022.
- [4] "LSH-GAN enables in-silico generation of cells for small sample high dimensional scRNA-seq data." S. Lall, S. Ray\*, S. Bandyopadhyay, Nat. Communication Biology, 577 (2022). <a href="https://doi.org/10.1038/s42003-022-03473-y">https://doi.org/10.1038/s42003-022-03473-y</a>.

### **B. Conference Papers Published**

- [1] L. Khatun, SkMd M. Hossain, Sumanta Ray, Anirban Mukhopadhyay: "An Autoencoder-based Deep Learning Approach for Classifying Colon and Rectum Adenocarcinoma", [IEEE] The 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) 2023; IIT Delhi, DOI: 10.1109/ICCCNT56998.2023.10307053, Electronic ISBN: 979-8-3503-3509-5.
- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):
- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Central purchase committee (Computer and IT related article)	Chairman	Computer and IT related Purchase activities of the University.

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2. Training and Placement Committee	Member	Any matters related to training and placement
3. Departmental Purchase Committee	Member	Purchase related activities of the department.
4. Syllabus Enrichment	Member	Any matters related to syllabus and curriculum
5. Departmental NAAC Core Committee:	Member	Deal with all NAAC related departmental data processing department for upcoming NAAC evaluation process.

### 10] Other responsibilities (Please specify, add rows if required):

1	Career counselling			
2	Remedial classes			
3	Member of Doctoral Research Committee			
4	Checked and verified students' Semester Grade Cards for various courses			
5	Reviewer for several prestigious journals like			
	Scientific Reports (Nature) (indexed in SCI/SCIE), Impact Factor: 4.996.			
	IEEE/ACM Transactions on Computational Biology and Bioinformatics (TCBB: indexed in SCI/SCIE), Impact Factor: 3.71.			
	IEEE Access (indexed in SCI/SCIE), Impact Factor: 3.367.			
	IEEE Transactions on Emerging Topics in Computational Intelligence (indexed in SCI/SCIE), Impact Factor: 8.28.			
	Communication Biology (indexed in SCI/SCIE), Impact Factor: 6.3.			
	Briefings in Bioinformatics (indexed in SCI/SCIE), Impact Factor: 13.9			
	Briefings in Functional Genomics (indexed in SCI/SCIE), Impact Factor: 4.8.			
	Practices in teaching & academic administration in the district			

# 11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	Research Guidance to the following M.Tech students:
	A. MD Imran Uddin
2	Setting Question Papers for End-Term Theory Examinations
3	Performed invigilation duty at End-Term Theory Examinations
4	Conducted Practical Examinations
5	Conducted Project Presentation & Viva Voce
6	Conducted Grand Viva Evaluation
7	Conducted Seminar Presentation
8	Evaluated Answer Scripts
9	Updated Courses/Curriculum Design
10	Prepared and Updated Syllabus for B.Tech., M.Tech., BCA and MCA programmes
11	Conducted several Lectures, Practicals, and Projects for the students
12	Projects Guidance for B. Tech, MCA students



### **Academic Practices**

## Academic Practices (for the academic year: (2022-2023)

1] Total number of teaching-days in the academic year:	170-180 Days
2] Total number of permanent teaching staff:	17
3] Total number of permanent teaching staff with PhD:	12
4] Number of programmes offered (please specify): B.Tech, M.tech, BCA, MCA	04
5] Number of sanctioned intake of students and Number of actual admissions: 58+18+30+30+6(Lat)	144 142
Training Programme/ Regressive Methodales 2	entation Programme- 01 FDP-10 esearch Course- 02
7] Number of Orientation Programme/ Refresher Course/ FDP/ Workshop/ Training Programme/ Research Methodology Course Capacity Building Programme etc. organised by the department:	s/ 02
8] Number of Training Programme/ Consultancy offered By the department:	
9] Number of academic collaborations made by the department:	
10] Innovative practices (please specify):	

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# Teaching-Learning-Evaluation process (for the academic year: (2022-2023)

1] Does teaching members participate in course designing?	YES
2] Does the department have a structured Board of Studies or similar academic body to design/ expand/ modify course content?	YES
3] Does the programme follow:  a. CBCS structure  b. Elective-based structure  c. Any other, please specify	YES YES YES
4] Does the department follow Academic Calendar implemented By the University?	YES
5] Use of Teaching-Learning tools/ platforms (Please specify) a. OHP b. LCD c. Interactive Boards d. LMS e. Any other	YES YES YES YES
6] Use of ICT in Teaching-Learning-Evaluation a. e-books b. e-journals c. research database/ repositories d. IT enabled classroom e. Online assignment f. Online assessment g. Online feedback	YES YES YES YES YES YES YES
7] Weekly class hour per course (average):	35Hrs
8] Whether remedial/ tutorial classes included in class routine?	YES
9] Does the programme offered has scope of Internship/ Project/ Field work/ Seminar presentation/ Industrial training?	YES
10] Does the department follow progressive evaluation of students?	YES
11] Number of students appeared and passed in the academic year:	

HEAD Sc. & Engg.
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# Research output (for the academic year: 2022-23)

- 1] Does the department offer MPhil/ PhD/ Post-Doctoral Programme: (Please specify): Yes
- 2] Number of students/ scholars registered/ enrolled in MPhil/ PhD/ Post-Doctoral Programme (If the answer to Q1 is yes): 25
- 3] Number of publications in refereed & peer-reviewed journals: 72
- 4] Number of book/ edited-volume/ book-chapter published with ISBN: 22
- 5] Number of patents registered: 2
- 6] Number of revenue generating events (Consultancy, Training Programme, MDP/ EDP etc.): Nil
- 7] Number of Seminar/ Conference/ Workshop/ FDP etc organised at State/ National/ International level: 02
- 8] Number of sponsored research projects:
  - a. Completed- 02
  - b. Ongoing- 02
- 9] Number of collaborative research projects:
  - a. Completed- 00
  - b. Ongoing-01
- 10] Any innovative research initiative adopted and implemented (please specify):

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# Infrastructure & facilities (departmental level)

1] Number of classrooms: 18

2] Number of ICT-enabled classrooms: 2

3] Number of laboratories: 6

4] Availability of licensed software/ databases: 11

5] Number of tutorial rooms: 2

6] Number of seminar halls: 1

7] Number of rooms for the teaching members: 4

8] Number of computer/ printer/ scanner available:

<b>找到特別的</b>	computer	printer	scanner
In laboratory	301	0	0
In teachers' enclosure	30	11	0
For Research scholars	13	1	0
For Administrative purpose	3	4	2

9] Whether Internet facility available in classrooms/ laboratory / teachers' enclosure? yes

10] Whether reprographic facility available? yes

11] Number of washroom facility (for male): 9

12] Number of washroom facility (for female):9

13] Presence of appropriate signage: yes

14] Barrier free environment ensured? Yes

Dept. of Computers W. Kolkala

# Initiatives and Supplementation for Students:

- 1] Whether Mentorship (Teacher-driven) for students is in place? Yes
- 2] Do the students participate in extra-academic activities and pursue Co-curricular activities? yes
- 3] Does the department arrange Industry-visit/ Industrial lecture/ Field-trips/ Excursions/ Archeological trips/ Exhibitions etc. for students?
- 4] Does the department arrange seminars/ workshops/ skill-development programmes etc. for students? yes
- 5] Does the department arrange programmes for the students focusing Soft-skill and Personality development?no
- 6] Does the department have any Student Forum/ Club/ Chapter etc.? yes
- 7] Does the department have a students' feedback mechanism in place? yes
- 8] Are the students provided with Training and Placement support? yes
- 9] Do the students receive ICT-based teaching? yes
- 10] Can the students access digital resources offered by the University library? yes
- 11] Please indicate the number of students those have qualified for NET/SET/GATE/GMAT/SLET/WBCS/UPSC or any other Competitive Exam (for the specific period) 02
- 12] Please indicate the number of students those have progressed for higher studies (for the specific period) 05
- 13] Please indicate the number of students those were offered placements by the University (for the specific period). 09

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