: FACULTY DETAILED RESEARCH DATA:

Name of the Faculty: SANGITA BOSE

Designation: ASSISTANT PROFESSOR

Department: COMPUTER SCIENCE & ENGNEERING

School: SCHOOL OF ENGINEERING

Research Area: Artificial Intelligence and Machine Learning, Deep Learning

Details of research portfolio of faculty: A.
   Researcher's ID details:

Google Scholar ID: X6ePv3sAAAAJ   Orchid ID: 0009-0008-8536-5012

Scopus ID   Vidwan ID: 512392

B. Publication details:
1. **Conference proceedings/ Conference paper:**

Sl. No.	Name of the Conference	Title of the paper	Month & Year of Publication	Author(s) Name	National/ International	doi number (if any)	ISSN/ISBN no.
1	Computational Intelligence in Communications and Business Analytics (CICBA-2022)	**A Smart Farming Production Approach Using Drones and IoT after COVID -19 situations**	**2022**	Sangita Bose, Dr. Romit S Beed	**International**		
2	International Conference on Integrative Science and Engineering (ICISE) 2023	**Recent Advancement and Future Perspective of 6G Communication**	**September 2023**	S. Bose, P. Nag, S. Maji, P. Roy Choudhury, S. Chatterjee	**International**		

3	International Conference on Integrative Science and Engineering (ICISE) 2023,September 2023.	**A Smart Farming Production Approach Using Drones and IoT after pandemic situations**	**September 2023**	S. Bose, R. Beed	**International**		
4	International Conference on Integrative Science and Engineering (ICISE) 2023	**Study and Development of Online Recommendation System for Healthcare Support**	**September 2023**	S. Bose, A. Dutta	**International**		
5	International Conference on Integrative Science and Engineering (ICISE) 2023	**Study and development of a Machine Learning-Based Intelligent Food Recommendation System**	**September 2023**	S. Bose, J. Paul	**International**		
6	International Conference on Integrative Science and Engineering (ICISE) 2023	**Visualization of Figural Representation and Emotion Recognition Using Deep Learning**	**September 2023**	A. Bose, R. Pal Das, S. Bose	**International**		
7	International Conference on Engineering Design and Computing (ICEDC)-2024	**Disease Prediction System using Machine Learning**	**February 2024**	S. Bose	**International**		
8	International Conference on Engineering Design and Computing (ICEDC)-2024	**Cognitive Transfer Learning: Leveraging Human-Like Learning Strategies for Machine Intelligence**	**February 2024**	S. Bose, A. Mondal	**International**		

9	International Conference on Engineering Design and Computing (ICEDC)-2024	**Ephemeral Learning Machines: Adaptable Models for Rapidly Changing Data Environments**	**February 2024**	S. Bose, R. Mondal	**International**		
10	International Conference on Engineering Design and Computing (ICEDC)-2024	**Meta-Reasoning Agents: Self-Aware Systems for Autonomous Decision-Making**	**February 2024**	S. Bose, M. Mandal	**International**		
11	International Conference on Engineering Design and Computing (ICEDC)-2024	**Fashion Trend forecasting with machine learning: predicting consumer preferences for personalized recommendation**	**February 2024**	S. Bose, A. Chatterjee	**International**		
12	International Conference on Engineering Design and Computing (ICEDC)-2024	**Graph neural network for culinary pairing; enhancing flavor harmony in food recommendation**	**February 2024**	S. Bose, S. Saha	**International**		
13	International Conference on Engineering Design and Computing (ICEDC)-2024	**Eco aware Machine learning: Minimizing Environmental Footprints in Model training**	**February 2024**	S. Bose, N. Kumari	**International**		
14	International Conference on Engineering Design and Computing (ICEDC)-2024	**Quantum-inspired neural networks: A hybrid approach to enhance computational efficiency**	**February 2024**	S. Bose, S. Pramanick	**International**		

15	International Conference on Engineering Design and Computing (ICEDC)-2024	**Neuromyotonic Fusion: Integrating Symbolic Reasoning with Deep Learning Architectures**	**February 2024**	S. Bose, P. Gorai	**International**		
16	International Conference on Engineering Design and Computing (ICEDC)-2024	**Dynamic Object Recognition in Visual Search: A Real Time Machine Learning Framework**	**February 2024**	S. Bose, S. Midya	**International**		
17	International Conference on Engineering Design and Computing (ICEDC)-2024	**Leaf Disease Detection using Machine Learning: A Review and Comparative Analysis**	**February 2024**	S. Bose, S. Acharjya	**International**		
18	International Conference on Engineering Design and Computing (ICEDC)-2024	**Disease Prediction System using Machine Learning**	**February 2024**	S. Bose, S. Marick	**International**		
19	International Conference on Engineering Design and Computing (ICEDC)-2024	**Face recognition-grounded attendance monitoring system for educational institution**	**February 2024**	S. Bose, S. Ghosh	**International**		
20	International Conference on Integrative Science and Engineering (ICISE) 2024	**Dynamic Pricing Strategies in E-commerce: A Reinforcement Learning Approach for Real-time Adaptation**	**June 2024**	S. Bose, S. Chakraborty, S. Paul, S. Debnath, P. Chakraborty	**International**		

21	International Conference on Integrative Science and Engineering (ICISE) 2024	**Ensemble Methods for Robust Food Recommendations: Aggregating Models for Improved Diversity and Accuracy**	**June 2024**	S. Bose, S. Marick	**International**		
22	International Conference on Integrative Science and Engineering (ICISE) 2024	**Deep Style Embeddings for Fashion Recommendation: Bridging the Gap between Visual Aesthetics and User Preferences**	**June 2024**	S. Bose, S. Midya	**International**		
23	International Conference on Integrative Science and Engineering (ICISE) 2024	**Neuroevolutionary Strategies: Combining Evolutionary Algorithms with Deep Learning for Model Design**	**June 2024**	S. Bose, D. Mondal, S. Ghosh, T. Chowdhury, S. Guha, S. Saif	**International**		
24	International Conference on Integrative Science and Engineering (ICISE) 2024	**Explainable AI in Culinary Arts: Interpretable Models for Transparent Food Recommendations**	**June 2024**	S. Bose, A. Biswas, S. Mondal, S. Das, J. Chakraborty, S. Bhattacharjee	**International**		
25	International Conference on Data Management, Analytics & Innovation	**Clustering-based Multivariate Prediction Model for Infectious Disease Forecasting in India**	**January 2025**	Sangita Bose, Romit S Beed	**International**		
26	International Conference on Data Management, Analytics & Innovation	**A clustering-based prediction approach for new cases of COVID-19 in India**	**January 2025**	Sourav Malakar, Sangita Bose, Saptarsi Goswami	**International**		

2. Publications in SCI/Scopus indexed Journals:

Sl. No	Name of the Journal (mention SCI/scopus)	Title of the paper	Month & Year of Publication	Author(s) Name (Highlight the corresponding and 1st author in every article)	doi number	Issue No. &Volume No.	Page no.	ISSN of the journal
1.	International Journal of HIT Transaction on ECCN,	An Analysis and Discussion of Human Sentiment Based on Social Network Information	2021	**S. Bose** S. Samanta, S. Chatterjee, B. Chakraborty, P. Halder	DOI: 10.5281/zenodo.5892855	Issue-1A (2021), Page 62-71 & Volume 7		ISSN: 0973-6875

3. Book chapter:

Sl. No.	Title of the book	Publishers	Author(s) Name (Highlight the corresponding and 1st author in every article)	Year	ISBN No.	doi no. (if applicable)
1	Sustainable and Predictive Analytics Model	Swami Vivekananda University	Sangita Bose	2024	978-93-5967-752-1	
2	Applications of Internet of Things (IoT) in Smart Cities	Swami Vivekananda University	Sangita Bose	2024	978-81-974233-0-7	
3	The Evolution and Future of Generative AI: From Theory to Practice	Swami Vivekananda University	Sangita Bose	2024	978-81-974233-5-2	
4	Application of Machine Learning in Smart Education Technology	Swami Vivekananda University	Sangita Bose	2024	978-81-974233-2-1	

4. Text/Reference book published from reputed national/international publishers:

Sl. No.	Title of the Text/Reference book	Publishers	Author(s) Name (Highlight the corresponding and 1st author in every article)	Year	ISBN No.	doi no. (if applicable)

5. Project granted:

Sl. No	Sponsoring Agency	Name of the project	Duration		Amount in Lakhs	PI/ CO-PI
			Starting Month & Year	Ending month & Year		

6. Consultancy Project Grant:

Sl No.	Project title	Funding Agency	Duration	Completed (yes/no)	Sanctioned amount (in Rs.)	PI and CO-PI (if any)

7. Patent/IPR granted:

Sl. No.	Name of the patent	Name of the applicant	Name of the inventor	Date of File	Date of Publication	Whether Granted (yes/no); If yes, Date of Grant	Application No.
1	Blockchain crowdfunding Platform	**Swami Vivekananda University**	**Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya, Arka Provo Naskar, Sneha Mondal, Faizal Khan, Munmun**	24/11/2024	29/11/2024	**NO**	202431091485 A

			Ghosh, Sambit Paul				
2	Youtube Clone Video Library	**Swami Vivekananda University**	**Sumit Maric, Sangita Bose, Sourav Saha, Diganta Bhattacharyya**	29/11/2024	06/12/2024	**NO**	202431093720 A
3	Crime pattern analysis and rate prediction	**Swami Vivekananda University**	**Diganta Bhattacharyya**	29/11/2024	06/12/2024	**NO**	202431093827A
4	Data analysis using machine learning on geo location data	**Swami Vivekananda University**	**Sukanya Dutta Gupta , Prof. Somsubhra Gupta, Sangita Bose , Sourav Saha , Diganta Bhattacharyya**	30/11/2024	06/12/2024	**NO**	202431094195 A
5	Face mask detection in real time	**Swami Vivekananda University**	**Beauty Mondal, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya**	03/12/2024	13/12/2024	**NO**	202431095248 A
6	A Heart arrhythmia prediction using Artificial neural network	**Swami Vivekananda University**	**Sangita Bose, Arpita Samanta, Sourav Saha, Diganta Bhattacharyya, Jayanta Chowdhury**	04/12/2024	13/12/2024	**NO**	202431095820 A
7	Heart disease prediction from symptom analysis using machine learning	**Swami Vivekananda University**	**Srija Biswas, Prof. Somsubhra Gupta, Sangita Bose, Sourav Saha, Diganta Bhattacharyya**	04/12/2024	13/12/2024	**NO**	202431095834 A
8	Anti-fraud system for credit card transaction using machine learning & data science	**Swami Vivekananda University**	**Rituparna Maity, Prof. Somsubhra Gupta, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya**	05/12/2024	20/12/2024	**NO**	202431096209 A
9	Precision in Estimation of Crop Yields using Machine Learning	**Swami Vivekananda University**	**Sudipta Ghosh, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya**	05/12/2024	20/12/2024	**NO**	202431095882 A
10	Analyzing customer bank churn using	**Swami Vivekananda University**	**Sangita Bose, Sourav Saha, Jayanta Chowdhury,**	05/12/2024	20/12/2024	**NO**	202431096223 A

			Diganta Bhattacharyya				
11	Plant disease detection application	**Swami Vivekananda University**	**Sourav Saha, Diganta Bhattacharyya, Subhankar Karmakar, Md. Arif Ahmad, Maroof Raza, Narayan Kumar Bhandari, Sabikun Nahar, Sangita Bose, Jayanta Chowdhury**	05/12/2024	20/12/2024	**NO**	202431096218 A
12	An intelligent gender identification method based on facial images using compound modules	**Swami Vivekananda University**	**Payal Bose, Sangita Bose, Sourav Saha**	24/11/2024	29/11/2024	**NO**	202431091480 A
13	Brain Tumor Prediction using Machine Learning	**Swami Vivekananda University**	**Sumana Chakraborty, Promita Maji, Sourav Saha, Sangita Bose, Jayanta Chowdhury**	27/11/2024	06/12/2024	**NO**	202431092982 A
14	Cardiovascular Diseases Prediction using Multimodal Methodology in Deep Learning	**Swami Vivekananda University**	**Sumana Chakraborty, Anupam Chowdhury, Sourav Saha, Sangita Bose, Jayanta Chowdhury**	28/11/2024	06/12/2024	**NO**	202431093353 A
15	Motion Maze-where Gestures Lead to Gaming Adventures	**Swami Vivekananda University**	**Jayanta Chowdhury, Prof. Somsubhra Gupta, Apurba Sarka, Goutam Mondal, Ananya Das, , Sourav Saha, Sangita Bose**	30/11/2024	06/12/2024	**NO**	202431094152 A
16	Parameter monitoring of incubator using IoT and Cloud	**Swami Vivekananda University**	**Sanjay Nag, Debalina Ghosh, Sourav Saha, Sangita Bose, Jayanta Chowdhury**	02/12/2024	13/12/2024	**NO**	202431094855A
17	Plant Leaf Disease Detection Using Deep Learning	**Swami Vivekananda University**	**Sukriti Santra, Tanmoy Kumar, Bishoi, Sourav Saha, Sangita Bose, Jayanta Chowdhury**	05/12/2024	20/12/2024	**NO**	202431095911 A

18	Hybrid Compiler	**Swami Vivekananda University**	**Souvik Gayan, Diprati Das, Prof. Somsubhra Gupta, Sangita Bose, Sumana Chakraborty, Subrata Nandi**	21/05/2024	19/07/2024	**NO**	202431039789 A
19	Virtual Trial Room	**Swami Vivekananda University**	**Jayanta Chowdhury, Apurba Sarkar, Deep Ash, Suhita Sen, Rupsa Saha, Swastika Mitra, Tiyasha Patra, Sourav Saha, Sangita Bose**	03/12/2024	13/12/2024	**NO**	202431095278 A