

# Dr. Gitosree Khan

## Associate Professor

Department of Information Technology

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### Brief Introduction:

- Received PhD (Engineering) degree in Computer Science & Engineering from National Institute of Technology, Durgapur on March 14, 2020.
- Received M. Tech Degree in Computer Science from University of Calcutta in 2010.
- Received B.E Degree in Computer Science & Engineering from Berhampur University, Orissa, India in 2005.
- 12<sup>th</sup> (ISCE) from Carmel Convent School, Durgapur in 1998.
- 10<sup>th</sup> (ICSE) from Pranavananda Vidyamandir, Durgapur in 1996.
- Presently, Associate Professor in the Department of Information technology of B. P. Poddar Institute of Management and Technology. Kolkata.
- Research interest in the field of Cloud Computing, IOT, ML, AI and Database Management System.
- Publication in several National, International conferences, journals and book chapter.
- Membership of Professional Bodies:

Sl. No.	Name of Professional Bodies	Membership no. with validity
1.	Member of IEEE	Annual (Member ID: 92712330).
2.	Member of ACM	Member ID: 5253213
3.	Member, IEEE Internet of Things Community	Life (Member ID: 97858122).
4.	Member, IEEE Cloud Computing Community	Life member
5.	Member, IEEE Computer Society Technical Council on Software Engineering.	Life member
6.	International Association of Engineers (IAENG)	Member Number: 321609
7.	Computer Science Teachers Association (CSTA)	Member Number: 198358009922

### Teaching & Research Activity:

- Set question paper of Semester Examination of Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT), Kolkata.
- Act as a Moderator of Semester Examination Question Paper for (Even & Odd) at St. Xavier's University, Kolkata, MAKAUT, Techno India Saltlake, IEM, Heritage Institute of Technology.
- Act as an External Examiner for (Even & Odd) semester at St. Xavier's University, Kolkata, Techno India Saltlake campus, Heritage Institute of Technology & Amity University, Kolkata.

- Prepared various Lectures notes in BPPIMT LMS & Youtube.
- Research Interest in the field of Cloud Computing, IOT Security and Software Engineering & ML
- Mentoring the students participating in various All India Hackathon competition.
- Guided UG, Master's and Ph.D. students.

### Curricular Activities:

- Act as a Program Chair of AISC 2024 & AISC 2025 Conference.
- Act as a Session Chair on various International Conference.
- Technical Program Committee Member of various National & International Conference.
- Act as an Invited Speaker in Workshop, Seminar & Conferences.
- Act as a Coordinator in various Symposium, Workshop and Seminar in collaboration with University of Calcutta, Jadavpur University and with other Industry collaboration.
- Reviewer of various International Journal & Conferences.
- Editor of Springer Book series “Emerging Trends in Computing and Communication” Lecture Notes in Electrical Engineering, Vol. 298, and ISBN 978-81-322-1816-6 & Springer "Information and Communication Technologies" series 2024.
- Organizing National Conference ETCC March 2014, 1<sup>st</sup> International Conference on Artificial Intelligence and Sustainable Computing AISC 2024 on July 11-13, 2024, 2<sup>nd</sup> International Conference on Artificial Intelligence and Sustainable Computing AISC 2025 on July 24-26, 2025.
- Attended various Faculty Development Programme/ Workshop/Refresher course/ Staff dev. / Teaching learning /Soft skill Program organized by IIT Bombay, Spoken tutorial, MHRD Govt of India, Computer Society of India (CSI), IEEE, Springer.

### Co- Curricular Activities:

- Programme Coordinator of NBA committee of Information Technology Department.
- Coordinator of Student Welfare Committee
- Coordinator of Programme Assessment Committee.
- Coordinator of BPPIMT Technical Forum Committee
- Chairperson of Department of Information Technology Project committee.
- Convenor of Institute Cultural Fest & Technical Fest
- Senior Advisor of Departmental Advisory Committee.
- Senior Member of Internal Quality Assurance Committee
- Member of Public Relation & Press & media & Publication Committee
- Member of Alumni Coordination Committee
- Member of Departmental Development plan Committee.
- Deputy Group Leader of Anti-ragging committee.

### Publications:

#### Book/ Monograph: 02 edited Book 06 Book chapters (1 in press)

1. Editor of “Emerging Trends in Computing and Communication” Lecture Notes in Electrical Engineering, Vol. 298, ISBN 978-81-322-1816-6, March 2014.



2. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, “Priority based Service Scheduling in Enterprise Cloud Bus Architecture”, Chapter 70 of “Frontiers in Computer, Communication and Electrical Engineering – Acharyya (Ed.)© 2016 Taylor & Francis Group, London, ISBN: 978-1-138-02877-7, 2016.
3. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, “Modelling and Analysis of Enterprise Cloud Bus Using a Petri Net Based Approach”, Book: Advanced Computing and Systems for

Security, Editors: Rituparna Chaki, Khalid Saeed, Agostino Cortesi, Nabendu Chaki, Volume Four, Part I, pp. 17 - 36, January 2017, Springer [DOI: 10.1007/978-981-10-3391-9\_2, Print ISBN: 978-981-10-3390-2, Online ISBN: 978-981-10-3391-9].

4. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, “Formal modelling of Enterprise Cloud Bus System: A High-level Petri-net based Approach”, Book: Requirements Engineering for Service and Cloud Computing – Editors: Muthu Ramachandran and Zaigham Mahmood, Part II, PP 121 – 149, Springer, 2017 [DOI: [https://doi.org/10.1007/978-3-319-51310-2\\_6](https://doi.org/10.1007/978-3-319-51310-2_6), Print ISBN978-3-319-51309-6, Online ISBN978-3-319-51310-2.
5. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, “Behavioral Analysis of Service Composition Patterns in ECB using Petri Net Based Approach”, R. Chaki et al. (eds.), Advanced Computing and Systems for Security Volume 995, pp. 53 – 66, ISSN 2194-5365 (electronic), ISBN 978-981-13-8962-7 (eBook), <https://doi.org/10.1007/978-981-13-8962-7>, Springer, Singapore, August 15, 2019.
6. Dr. Gitosree Khan, Arijit Banerjee, Aritra Bhattacharjee, Krishnendu Nandi, Akashdeep Bhattacharya, “Asynchronous BCI (Brain-Computer Interface) switch for an alarm”, Book: "Medical Internet of Things: Techniques, Practices and Applications", CRC Press (Taylor & Francis Group) USA, ISBN 9780429318078. May 17, 2020.
7. Gitosree Khan, Shankar Kr. Shaw, Sonal Aggarwal, Akanksha Kumari Gupta, Saptarshi Halder, Saurabh Adhikari & Soumya Sen,” Analysis and classification of Physiological Signals for Emotion Detection”, Book: Advances in Intelligent Systems and Computing Springer Singapore, Volume 1422, pp 79–90, 29 June 2022, ISSN: 2194-5365.
8. Gitosree Khan, Sheetam Coondoo, Srinjoy Gope, Agradip Banik, Soumyadeep Chatterjee, Stobak Dutta, “Emotion Detection and Anomaly Recognition in Crowds: Spotting Suspicious Behaviour”, Taylor & Francis Group, LLC, 2024, CRC Press, Volume 25, pp. 290 - 300, ISBN: 9781003540298. 26 February 2026.

#### **International Journal:**

1. Gitosree Khan, Sabnam Sengupta and Ananya Kanjilal. Article: Representation and Analysis of Object-Oriented Graph (OOG): A Graph Algorithmic Approach. International Journal of Computer Applications 55(4): pp. 30-37, October 2012. Published by Foundation of Computer Science, New York, USA.
2. Gitosree Khan, Anirban Sarkar, Sabnam Sengupta, (2017), “Behavioral Modeling of Enterprise Cloud Bus System: High Level Petri Net based Approach”, (SERSC) International Journal of Software Engineering and Its Applications (IJSEIA), SCOPUS indexing, vol. 11, no. 7 (2017), pp. 13-30, July 2017, [DOI: <http://dx.doi.org/10.14257/ijseia.2017.11.7.02>, ISSN: 1738-9984 (IJSEIA), **Scopus indexing**, vol. 11, no. 7, July 2017.
3. Gitosree Khan, Anirban Sarkar, Sabnam Sengupta, “HBSD: A Hadoop Based Service Discovery Model for Enterprise Cloud Bus”, International Journal of Information Technology and Web Engineering (IJITWE), IGI Global, March 12, 2018. doi: 10.4018/IJITWE.2019070103 [ISSN: 1554-1045], Volume 14, Issue 3, pp. 27. (**Indexed in Scopus, Emerging Source of Citation Index**).
4. Gitosree Khan, Anirban Sarkar, Sabnam Sengupta, “DYNAMIC SERVICE COMPOSITION IN ENTERPRISE CLOUD BUS ARCHITECTURE”, International Journal of Web Information Systems (IJWIS), ISSN: 1744-0084; <https://doi.org/10.1108/IJWIS-01-2019-0005>, Vol. 15 No. 5, Emerald publisher, pp. 550-576, July, 2019. (**Indexed in Scopus, Emerging Source of Citation Index**).
5. Gitosree Khan, Anirban Sarkar, Sabnam Sengupta, “Micro-service Composition Patterns in Enterprise Cloud Bus System”, Communicated in Transaction on Cloud Computing, **IEEE Computer Society**, March 2025. (SCI) (In press)

#### **Conferences:**

1. Gitosree Khan et al. "A Probabilistic Model for Analysis and Fault Detection in the Software System: An Empirical Approach." National Conference on Emerging Trends in Computing and Communication. Springer, pp. 253-265, March 2014, ISBN: 978-81-322-1817-3.

2. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, Narayan C Debnath, "Modeling of Inter-Cloud Architecture using UML 2.0: Multi-Agent Abstraction based Approach", **IEEE 23<sup>rd</sup> International Conference on Software Engineering and Data Engineering (SEDE)**, pp. 149-154, October 13-15, 2014.
3. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, "WSRM: A Relational Model for Web Service Discovery in Enterprise Cloud Bus (ECB)", **IEEE 3<sup>rd</sup> International Conference on Eco-friendly Computing and Communication Systems (ICECCS)**, NITK Surathkal, Mangalore, pp. 117-122, December 18th-21st, 2014.
4. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, "Modeling of Services and their Collaboration in Enterprise Cloud Bus (ECB) using UML 2.0", **IEEE 2015 International Conference on Advances in Computer Engineering and Applications (ICACEA)**, IMS Engineering College, Ghaziabad, India, pp. 207-213, March 19<sup>th</sup>-20<sup>th</sup>, 2015.
5. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, Narayan C Debnath, "Web Service Discovery in Enterprise Cloud Bus Framework: T Vector Based Model", **13<sup>th</sup> IEEE International Conference on Industrial Informatics (INDIN 2015)**, Cambridge, UK, pp. 1672 – 1677, July 22<sup>nd</sup>-24<sup>th</sup>, 2015.
6. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, Narayan C. Debnath, "XML based Service Registration System for Enterprise Cloud Bus", **IEEE International Conference on Computing, Management and Telecommunications (ComManTel 2015)**, Vietnam, pp. 250 – 255, December 28<sup>th</sup> – 30<sup>th</sup>, 2015.
7. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, "Priority based Service Scheduling in Enterprise Cloud Bus Architecture", In **3<sup>rd</sup> IEEE International Conference on Foundations and Frontiers in Computer, Communication and Electrical Engineering (C2E2)**, SKFGI, Mankundu, pp. 363 – 368, January 15<sup>th</sup> – 16<sup>th</sup>, 2016.
8. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, Narayan C. Debnath, "Performance Analysis of Service Discovery for Enterprise Cloud Bus (ECB)", **IEEE International Conference on Industrial Technology (ICIT 2016)**, Taipei, Taiwan, pp. 1729 – 1735, March 14-17, 2016.
9. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, "Modelling and Analysis of Enterprise Cloud Bus using a Petri Net Based Approach", **3<sup>rd</sup> International Doctoral Symposium on Applied Computation and Security Systems (ACSS)**, Kolkata, Indian, pp. 17 - 36, August 12 – 14, 2016.
10. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, "A Graph Semantic Based Approach for Modelling of Enterprise Cloud Bus System Dynamics", **IEEE 7<sup>th</sup> International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE 2017)**, Noida, India, pp. 298-305, January 12<sup>th</sup> – 13<sup>th</sup>, 2017.
11. Gitosree Khan, Sabnam Sengupta, Anirban Sarkar, "Behavioural Analysis of Service Composition Patterns in ECB using Petri Net Based Approach", **6<sup>th</sup> International Doctoral Symposium on Applied Computation and Security Systems (ACSS)**, Kolkata, Indian, pp. 53 – 66, March 12 – 13, 2018.
12. Stobak Dutta, Anirban Mitra, Neelamadhab Padhy, Gitosree Khan, Review on Sensors for Emotion Recognition, **4<sup>th</sup> International Conference on Data Engineering and Communication Technology (ICDECT 2020)** Springer, Warangal, India, Warangal, India, ISBN No: Online ISBN 978-981-16-0081-4; Print ISBN 978-981-16- 0080-7, Vol. 63, pp. 571-579, September – 2020. doi: <https://link.springer.com/book/10.1007/978-981-16-0081-4>.
13. Gitosree Khan, Shankar Kr. Shaw, Sonal Aggarwal, Akanksha Kumari Gupta, Saptarshi Halder, Saurabh Adhikari & Soumya Sen," Analysis and classification of Physiological Signals for Emotion Detection", **2<sup>nd</sup> International Conference on Mathematical Modeling and Computational Science (ICMMCS 2021)**, Springer Singapore, pp 79–90, 29 June 2022, ISBN: 978-981-19-0182-9 doi: <https://doi.org/10.1007/978-981-19-0182-9>.
14. Sheetam Coondoo\*, Stobak Dutta, Amartya Chakraborty and Gitosree Khan, "An Approach for Handling Class Imbalance for Emotion Recognition in the Valence-Arousal Plane", **1st International Conference on Artificial Intelligence & Sustainable Computing (AISC 2024)**,

(July 2024), Springer. (Scopus indexed) [In Press]

15. Gitosree Khan, Navoneel Dey, Shreya Banerjee, Archak Nath, Sheetam Condo, "A LLM based test script generation framework for Acceptance Testing of mobile applications", 2<sup>nd</sup> International Conference on Artificial Intelligence & Sustainable Computing (AISC 2025), (July 2025), Springer. (Scopus indexed) [In Press]

**Any other relevant information:**

**Details of Awards/ Honors:**

Best teacher Award in Academic Excellence in 2016 - 2021 in B. P. Poddar Institute of Management & Technology, Kolkata

Best teacher Award in R & D Excellence in 2016, 2018 & 2021 in B. P. Poddar Institute of Management & Technology, Kolkata

Project Title: "Predictive Analysis of Stock Market", awarded as "Best Project" by Cognizant Technology Solutions in AY 2015-16.

**Experience Details: (19 years 6 months)**

Sl. No.	Name and address of employer	Designation	From	To	Duration	Type of organization
1	B P PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY, KOLKATA	ASSOCIATE PROFESSOR	01/09/2023	Till date	1 year 8 months	Private
2	B P PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY, KOLKATA	ASSISTANT PROFESSOR	01/07/2015	31/08/2023	8 yrs	Private
3	B P PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY, KOLKATA	ASSISTANT PROFESSOR	01/07/2010	30/06/2015	5 yrs	Private
4	B P PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY, KOLKATA	LECTURER	28/01/2006	30/06/2010	4 years 5 months	Private

**IT Exposure:**

- Operating System : LINUX, WINDOWS.
- Languages : C, JAVA, SQL, PL/SQL
- Subjects : Operating System, Cloud Computing, Design Analysis & Algorithm, Data Structure, Networking, Software Engineering etc.

**Personal Details:**

**Name** : **DR. GITOSREE KHAN**  
**DOB** : 22/01/1980  
**Sex** : Female  
**Category** : General  
**Marital Status** : Unmarried  
**Nationality** : Indian  
**Languages Known** : English, Bengali and Hindi

**Declaration**

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Date:  
Place: Kolkata

Your's faithfully,

(GITOSREE KHAN)