



Name:SAYAN DAS

Designation:Assistant Professor

Qualifications: PhD, M.Tech., MCA

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Biographical Sketch

Motivated, high energy educator over 14 years' experience with demonstrated track record fostering student learning and associate with different research projects. Background includes professional work experience backed by degrees in computer science and engineering and proficient in Health Informatics, Data Analytics, Artificial Intelligence and Quantum Computing.

For Details: <https://orcid.org/my-orcid?orcid=0000-0002-9899-6664> (ORCID),

<https://scholar.google.com/citations?user=-8ZV8tQAAAAJ&hl=en>(Google Scholar)

Areas of Specialisation and Research

Healthcare informatics,Artificial Intelligence, Quantum Computing.

Teaching Experience

- Assistant Professor, Sarada Ma Girls' College, Ramakrishna Vivekananda Mission under West Bengal State University from Aug 2013-Sep 2015.
- Lecturer, MBA department Techno India Saltlake, West Bengal University of Technology (MAKAUT) affiliated College, from Jan 2013- Aug 2013.
- Lecturer, MCA department, Guru Nanak Institute of Technology, West Bengal University of Technology (MAKAUT) affiliated College, from June 2011- Jan2013.
- Visiting Faculty, Institute of Engineering and Management, Kolkata.

Research Experience

Worked on ITRA (Information Technology Research Academy, Govt. of India) sponsored project "RemoteHealth: A Framework for Healthcare Services using Mobile and Sensor-Cloud Technologies" at Indian Institute of Engineering Science and Technology, Shibpur, as a Junior Research Fellow (JRF) since Oct.,2015 - Dec. 2018.

Administrative Responsibility

- Placement Coordinator, Department of Computer Science, Faculty of Science.
- Sports Coordinator, Faculty of Science.

Publications

Journal

1. **Sayan Das** and J. Sil, "Rough Information Theory based approach to manage uncertainty in Remote Healthcare," International Journal of Fuzzy Computation and Modelling, Inderscience, 2022, doi: 10.1504/IJFCM.2023.10045015. <https://www.inderscienceonline.com/doi/abs/10.1504/IJFCM.2022.124361>
2. **Sayan Das** and Jaya Sil, "Managing Boundary Uncertainty in diagnosing the patients of Rural area using Fuzzy and Rough set," Journal of Healthcare Informatics Research, Springer, 2021, doi: 10.1007/s41666-021-00109-4. <https://link.springer.com/article/10.1007/s41666-021-00109-4>
3. **Sayan Das** and J.Sil, "Managing Uncertainty in Imputing Missing Symptom Value for Healthcare of Rural India," Health Information Science and Systems, Springer, vol. 7, no. 5, pp. 1–15, Feb. 2019,doi: 10.1007/s13755-019-0066-4. <https://link.springer.com/article/10.1007/s13755-019-0066-4>
4. K.Bal, **Sayan Das** and T.U.Paul, " Security Algorithms in Wearable and Implantable Medical Devices: A Comprehensive Overview", St. Xaviers University Kolkata Journal of Interdisciplinary Research, Vol. 2, Issue 1, 2024, issn no: 2584-055X. <https://sxukjir.sxuk.edu.in/assets/PDF/SXUKJIR%20-%20Abstracts%20Booklet%20-%20Vol%20%20-%202024.pdf>

Conference

1. Paul, T.U., **Sayan Das**, Jhunjhunwala, K. (2026). Deciphering the Black Box: An Overview of Explainable Artificial Intelligence (XAI) Techniques in Healthcare. In: Bhateja, V., El Barachi, M., Azar, A.T., Sharma, D.K. (eds) Information System Design: Big Data Analytics and Data Science. ISDIA 2025. Lecture Notes in Networks and Systems, vol 1539. Springer, Singapore. https://doi.org/10.1007/978-981-96-9248-4_33 **(BEST PAPER AWARD)**
2. A. Bhattacharjee, A. Das and **Sayan Das**, "A Layered Blockchain Architecture for Unbiased and Trustworthy Internet Voting Systems," 2025 IEEE 6th India Council International Subsections Conference (INDISCON), Rourkela, India, 2025, pp. 1-6, doi: 10.1109/INDISCON66021.2025.11254172. <https://ieeexplore.ieee.org/document/11254172>
3. **Sayan Das**, "A RELIABLE PRIMARY HEALTHCARE SYSTEM THROUGH INFORMATION UNCERTAINTY MANAGEMENT," 3rd Doctoral Colloquium, 2021, St. Xavier's University, Kolkata, 30th & 31st October. **(Best paper in the Track: Wellness: Health and Hospitality)**.
4. **Sayan Das** and Jaya Sil, Knowledge uncertainty management in remote healthcare based on mutual information published and presented 2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS), Mar. 2020, doi: 10.1109/icaccs48705.2020.9074480. <https://ieeexplore.ieee.org/abstract/document/9074480/>
5. **Sayan Das** and Jaya Sil, Managing Uncertainty to rural primary healthcare using rough set theory published and presented at 4th IEEE International Conference on Computing Communication and

Automation (ICCCA 2018), Greater Noida, India. doi: 10.1109/CCAA.2018.8777566.

<https://ieeexplore.ieee.org/abstract/document/8777566/>

6. **Sayan Das** and Jaya Sil, Missing value imputation in medical records for remote health care services, published and presented at In: Mishra D., Yang XS., Unal A. (eds) Data Science and Big Data Analytics. Lecture Notes on Data Engineering and Communications Technologies, vol 16. Springer, Singapore. ACM Women in Research (ISDB-ACMWIR 2018) (ISBN:978-981-10-7641-1). https://doi.org/10.1007/978-981-10-7641-1_28
7. **Sayan Das** and Jaya Sil , Uncertainty Management of health attributes for primary diagnosis, published and presented at IEEE International Conference on Big data Analytics and Computational Intelligence (ICBDACI 2017), Andhra Pradesh (ISBN: 978-1-5090-6399- 4), doi: 10.1109/ICBDACI.2017.8070864 <https://ieeexplore.ieee.org/abstract/document/8070864/>
8. **Sayan Das**, Remote Health Management to handle basic health data using fuzzy approach, published at International Conference on Mathematics and Computer Science 2017, (ICMSC 2017), Bangalore (ISBN: 978-93-86435-00-2). <https://portal.issn.org/resource/ISSN/2278-8697>

Book Chapter

1. **Sayan Das** and Arnav Das, “ Pre-Quantum to Post Quantum Cryptography Transition:A Journey Connecting the Security and Challenges Eras” in the book Integration of AI, Quantum Computing, and Semiconductor Technology, IGI Global, 2024, DOI: 10.4018/979-8-3693-7076-6.ch012. <https://doi.org/10.4018/979-8-3693-7076-6.ch012>
2. **Sayan Das** and Jaya Sil, “Primary Healthcare Model for Remote Area Using Self-Organizing Map Network”, Computational Intelligence and Healthcare Informatics., vol. 1. 111 River Street, Hoboken, USA: Wiley Scrivener Publishing LLC, 2021, pp. 235–254 (ISBN: 9781119818687). <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119818717.ch13>
3. **Sayan Das** and Jaya Sil, “Expert System for investigating Primary Health of patients”, published at Annual Technical Volume of Computer Engineering Division Board, Volume I,2017, Theme: e-Health, The Institute of Engineers (India). (ISBN: 978-93-86435-00-2). <https://www.ieindia.org/webui/IEI-Publication.aspx#annual-technical-volume>

Professional Activities

- Reviewer of journal paper published by Elsevier, IEEE, Springer.
- External Moderator, Answer Script Scrutinizer of Rani Rashmoni Green University.
- Member of Computer Society of India
- External Examiner of MAKAUT.
- Session Speaker in Faculty Development Program on 21st May 2025, Techno Main Saltlake, Kolkata