



ASSISTANT PROFESSOR

Dr. Somnath Maji

Contact: somnathmajivucs@gmail.com

RESEARCH INTERESTS:

GENETIC ALGORITHM, TSP,
MATHEMATICAL MODELING, DISCRETE
OPTIMIZATION, FIREWORKS
ALGORITHM

EXPERIENCE:

Academics: 9 Years

Industry: ---

EDUCATION:

1. PhD (CSE) MAKAUT
2. M.Tech (CSE) MAKAUT
3. MCA VIDYASAGAR UNIVERSITY
4. B.Sc (MATH (H)) THE UNIVERSITY OF BURDWAN

Courses Taught:

Database Management System

Projects Handled:

Sensor Networks, IoT, J2EE

Research Publications:

1. Maji, S., Maity, S., Nielsen, I. E., Giri, D., & Maiti, M. (2025). A multi-objective sustainable multipath delivery problem in hilly regions with customer-satisfaction using TLBO. Applied Soft Computing, SCIE, Impact factor 7.2, Elsevier, <https://doi.org/10.1016/j.asoc.2025.113100>
2. Maji, S., Pradhan, K., Maity, S., Nielsen, I. E., Giri, D., & Maiti, M. (2025). Emergent multipath COVID-19 specimen collection problem with green corridor through variable length GA. Expert Systems with Applications, SCIE, Impact factor 8.5, Elsevier, <https://doi.org/10.1016/j.eswa.2023.120879>.
3. Maji, S., Maity, S., Bsau, S., Giri, D., & Maiti, M. (2024). Varied offspring memetic algorithm with three parents for a realistic synchronized goods delivery and

service problem. Soft Computing, SCIE, Impact factor 4.1, Springer, <https://doi.org/10.1007/s00500-023-09574-y>.

4. Maji, S., Pradhan, K., Maity, S., Nielsen, I. E., Giri, D., & Maiti, M. (2023). Emergent multipath COVID-19 specimen collection problem with green corridor through variable length GA. { Expert Systems with Applications}, SCIE, Impact factor 8.665, Elsevier, <https://doi.org/10.1016/j.eswa.2023.120879>.
5. Maji, S., Pradhan, K., Maity, S., Nielsen, I. E., Giri, D., & Maiti, M. (2023). Multipath TPP with time-dependent market structure using quantum-inspired variable length genetic algorithm. {Computers & Industrial Engineering}, SCI, Impact factor 7.9, Elsevier}
6. Thakur, K., Maji, S., Maity, S., Pal, T., & Maiti, M. (2023). Multiroute fresh produce green routing models with driver fatigue using Type-2 fuzzy logic-based DFWA. Expert Systems with Applications, SCIE, Impact factor 8.5, Elsevier, <https://doi.org/10.1016/j.eswa.2023.120300>.
7. Khatua, S., De, D., Maji, S., Maity, S., & Nielsen, I. E. (2024). A federated learning model for integrating sustainable routing with the Internet of Vehicular Things using genetic algorithm. Decision Analytics Journal, 100486, Scopus, Elsevier.
8. Maji, S., Maity, S., Giri, D., Castillo, O., & Maiti, M. (2023). A multi-path delivery system with random refusal against online booking using Type-2 fuzzy logic-based fireworks algorithm. {Decision Analytics Journal}, Scopus, Elsevier, <https://doi.org/10.1016/j.dajour.2022.100151>.
9. Title: - "Study of Swarm Intelligence Technology, Its Principals, Capabilities and Concepts for Algorithms." UNIVERSAL RESEARCH REPORTS | REFEREED | PEER REVIEWED ISSN : 2348 - 5612 | Volume : 04 , Issue : 04 | July - September 2017 (UGC APPROVED)
10. Title:- "Various Heuristic techniques used for problem solving : A Review" UNIVERSAL RESEARCH REPORTS | REFEREED | PEER REVIEWED ISSN : 2348 - 5612 | Volume : 04 , Issue : 06 | July - September 2017 (UGC APPROVED)
11. Title:- "Role, Effectiveness with Application of ICT in 21st Century's in Teacher Education " UNIVERSAL RESEARCH REPORTS | REFEREED | PEER REVIEWED ISSN : 2348 - 5612 | Volume : 04 , Issue : 07 | October - December 2017 (UGC APPROVED)
12. Title: - "A Genetic Algorithm for Constrained Solid Traveling Purchaser Problem". Proceedings of the International Conference on Advancing Frontiers in Operational Research: Towards a Sustainable World (AFOR-2017)
13. Title:- "A modified Teaching-learning-based optimization algorithm for traveling salesman problem" in the 1st International Conference on Human-Centric Smart Computing (ICHCSC 2022) organized by: Department of Computer Application, University of Engineering & Management, Jaipur.

14. Title:- "An Opposition-based Genetic algorithm for multi-path routing problem with risk". In the Congress on Research in Engineering, Science & Management (CRESM 2022) ORGANIZED BY PADRE CONCEICAO COLLEGE OF ENGINEERING, VERNA, GOA Technically Sponsored by SOFT COMPUTING RESEARCH SOCIETY LOCATION: PADRE CONCEICAO COLLEGE OF ENGINEERING, VERNA, GOA, INDIA.

Additional Responsibilities:

NBA Team

Awards Obtained:

1. Awarded "BRONZE MEDAL" from MAKAUT as third topper in M. Tech.
2. Awarded "SILVER MEDAL" from VIDYASAGAR UNIVERSITY as second topper in MCA.

