

Publications

Book

1. **Title:** Fundamental of Cloud Computing: Technologies and Application
Authors: Manoj Kumar Patra and Anisha Kumari
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2. **Title:** Fundamental of Machine learning and Deep Learning
Authors: Anisha Kumari, Ranjan Kumar Behera and Kirti Kumari
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Journals

3. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo, Satya Prakash Sahoo "Prediction of link evolution using community detection in social network ", *Computing, Springer, 2022* DOI: <https://doi.org/10.1007/s00607-021-01035-4>
4. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo "Workflow aware analytical model to predict performance and cost of serverless execution", *Concurrency and Computation: Practice and Experience, Wiley, 2020* , DOI: <https://doi.org/10.1002/cpe.7743>.
5. **Anisha Kumari**, Ranjan Kumar Behera, Kshirasagar Sahoo, Anand Nayyar, Ashish Kumar Luhach, Satya Prakash Sahoo; Supervised link prediction using structuredbased feature extraction in social network . *Concurrency and Computation: Practice and Experience, Wiley, 2020* <https://doi.org/10.1002/cpe.5839>.
6. **Anisha Kumari**, Bibhudatta Sahoo "ACPM: adaptive container provisioning model to mitigate serverless cold-start ", *Cluster Computing, Springer, 2022* DOI: <https://doi.org/10.1007/s10586-023-04016-8>
7. Ranjan Kumar Behera, **Anisha Kumari**, Sung-Bae Cho "Scalable Cold-Start Optimization in Serverless Computing: Leveraging Function Fusion With PanOpticon Simulator ", *IEEE Access, IEEE, 2025* DOI: <https://doi.org/10.1109/ACCESS.2025.3589393>
8. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo "Emergence of Serverless Computing in Cloud: A State of Art on Challenges and Opportunities ", *Machine Learning with Applications, Elsevier, 2025* <https://doi.org/10.1016/j.mlwa.2026.100862>.
9. **Anisha Kumari**, Manoj Kumar Patra, Ranjan Kumar Behera, Bibhudatta Sahoo "Resource optimization in performance modeling for serverless application ", *International Journal of Information Technology, Springer, 2022* DOI: <https://doi.org/10.1007/s41870-022-01073-x>
10. **Anisha Kumari**, Ajibesh Mohapatra, Bibhudatta sahoo "Optimizing performance of serverless application using PanOpticon ", *International Journal of Information Technology, Springer, 2022* DOI: <https://doi.org/10.1007/s41870-023-01325-4>

Book Chapters

11. **Anisha Kumari**, Manoj Kumar Patra, Bibhudatta Sahoo, Data Controlling and Security Issues in Cloud: A Step Towards Serverless. Perspectives on Social Welfare Applications Optimization and Enhanced Computer Applications, Published by IGI Global.

12. **Anisha Kumari**, Bibhudatta Sahoo. Serverless architecture for healthcare management systems. Handbook of research on mathematical modeling for smart healthcare systems Published by IGI Global.
13. Manoj Kumar Patra, **Anisha Kumari**, Bibhudatta Sahoo, and Ashok Kumar Turuk. Challenges and Opportunities Toward Integration of IoT with Cloud Computing. Integration of IoT with Cloud Computing for Smart Applications, Published by Chapman and Hall/CRC.
14. Manoj Kumar Patra, **Anisha Kumari**, Bibhudatta Sahoo, Ashok Kumar Turuk. Smart Healthcare System Using Cloud-Integrated Internet of Medical Things. Exploring the Convergence of Computer and Medical Science Through Cloud Healthcare, Published by IGI Global.
15. **Anisha Kumari**, Bibhudatta Sahoo. A Systematic Review of Quantum Cloud Computing: Analyzing Key Developments and Challenges, Quantum Inspired Artificial Intelligence Technique and Applications, Springer (Accepted)
16. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo. Stakeholder and Social Network Studies for Management of Water Infrastructure Planning, Water Informatics: Challenges and Solutions using State of ART Technologies, Published by Springer.
17. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo. Quantum Cloud Computing: Key Technologies, Challenges, and Opportunities, Published by Springer.
18. Dukuru Chiranjeevi, **Anisha Kumari**, Ranjan Kumar Behera, Tarun Biswas. Quantum Neural Networks: Exploring Quantum Enhancements in Deep Learning, Published by Springer.

Conferences

19. **Anisha Kumari**, Md Akram Khan, Bibhudatta Sahoo. Workflow Sensitive Access Management in Serverless Computing. 2022 IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC), IEEE, GIET University, Gunupur, Odisha, 15-17th December, 2022.
20. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo, Satya Prakash Sahoo. Supervised Machine Learning for Link Prediction Using Path-Based Similarity Features . INDICON 2020, Netaji Subhas University of Technology, New Delhi, India, 10-13 December, 2020.
21. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo, Satya Prakash Sahoo. Quantifying Influential Communities in Granular Social Networks Using Fuzzy Theory. International Conference on Computational Science and Its Applications, 2020 (ICCSA 2020), Springer, Cagliari, Italy, 1-4th July, 2020.
22. **Anisha Kumari**, Bibhudatta Sahoo, Ranjan Kumar Behera. Mitigating Cold-Start Delay using Warm-Start Containers in Serverless Platform . INDICON 2022, Cochin University, Kerala, India, 24-26 November, 2022.
23. **Anisha Kumari**, Bibhudatta Sahoo, Ranjan Kumar Behera, Sanjay Misra, Mayank Mohan Sharma. Evaluation of integrated frameworks for optimizing qos in serverless computing. International Conference on Computational Science and Its Applications, 2021 (ICCSA 2021), Springer, Cagliari, Italy, 13-16th Springer, 2021.
24. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo, Sanjay Misra. Role of serverless computing in healthcare systems: case studies. International Conference on Computational Science and Its Applications, 2022 (ICCSA 2022), Springer, Malaga, Spain, 4-7th July, 2022.
25. **Anisha Kumari**, Manoj Kumar Patra, Bibhudatta Sahoo. Comparative Study of Workflow Modeling Services Based on Activity Complexity. International Conference on Computing, Communication and Learning, 2022 Springer Nature, NIT Warangal, 27-29th October, 2022.

26. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo. Mitigating Serverless Tail Latency: A Comprehensive Study of Factors and Strategies. International Conference on Information Technology, 2023 IEEE, NIT Raipur, 13-15th December, 2023.
27. Kanchan Tirkey, **Anisha kumari**, Sagarika Mohanty, Bibhudatta Sahoo. A Novel Function Fusion Approach for Serverless Cold Start. 2023 International Conference on Communication, Circuits, and Systems (IC3S), Springer, KIIT Bhubaneswar, Odisha, India 26-28th May, 2023.
28. Md Akram Khan, Sambit Kumar Mishra, **Anisha Kumari**, and Bibhudatta Sahoo. Task Allocation in Containerized Cloud Computing Environment. 2022 International Conference on Advancements in Smart, Secure and Intelligent Computing (ASSIC), Springer, KIIT University, Bhubaneswar, Odisha, India 19-20th Nov, 2022.
29. Manoj Kumar Patra, **Anisha Kumari**, Bibhudatta Sahoo, Ashok Kumar Turuk. Docker Security: Threat Model and Best Practices to Secure a Docker Container. 2022 IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC), IEEE, GIET University, Gunupur, Odisha, 15-17th December, 2022.
30. **Anisha Kumari**, Ranjan Kumar Behera, Bibhudatta Sahoo. "Mitigating Serverless Tail Latency: A Comprehensive Study of Factors and Strategies". 2023 OITS International Conference on Information Technology (OCIT), IEEE, NIT Raipur, India, 13-15th December, 2023.
31. **Anisha Kumari**, Abhish Anand, Bibhudatta Sahoo. "From Stateless to Stateful: A Comparative analysis of Stateful Serverless Computing Frameworks". International Conference on Computational Intelligence (ICCI 2023) on November 04-05, 2023 at Sardar Vallabhbhai National Institute of Technology, Surat, India.
32. Simran, **Anisha Kumari**, Ranjan Kumar Behera. "HiEn-mBERT+: A Lightweight Fine-Tuned Transformer for Hindi-English Code-Mixed Sentiment Analysis". 2025 IEEE 3rd International Symposium on Sustainable Energy, Signal Processing, and Cybersecurity November 06-08, 2025 GIET University, Gunupur, Odisha, India.
33. **Anisha Kumari**, Rishabh Shukla, Harsh Rastogi, Anubhav Singh, Hrishant Atri, Aryan Jaiswal, Ranjan Kumar Behera. "Dynamic Network Evolution Modeling with Time-Series Structural Features". 2026 International Conference on Intelligent Computing, Networks, and Security (IC-ICNS) March 26 - 28, 2026, 2025 C. V. Raman Global University. Bhubaneswar, Odisha, India.

Patents

34. **Title:** Intelligent System for Dynamic Resource Allocation in Cloud Computing
Date of publication: 03.08.2024
Inventers: Anisha Kumari, Ranjan Kumar Behera, Bibhudatta Sahoo
Patent No: 202431055536
35. **Title:** Cloud Resource Allocating Smart Device
Date of publication: 29.01.2025
Inventers: Dr. Manoj Kumar Patra, Dr. Anisha Kumari, Dr. Bibhudatta Sahoo, and Dr. Ashok Kumar Turuk
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36. **Title:** Serverless Computing Monitoring Device
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Inventers: Dr. Anisha Kumari, Dr. Manoj Kumar Patra, Dr. Ranjan Kumar Behera, Dr. Bibhudatta Sahoo, and Dr. Ashok Kumar Turuk
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