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LIST OF PUBLICATIONS

Journal Papers (Related to Thesis)

1. **Moirangthem Biken Singh**, Navneet Taunk, Naveen Kumar Mall, and Ajay Pratap, “Criticality and Utility-aware Fog Computing System for Remote Health Monitoring,” in IEEE Transactions on Services Computing, vol. 16, no. 3, pp. 1738-1749, 1 May-June 2023. (IF: 5.5, Published)
2. **Moirangthem Biken Singh**, Himanshu Singh, and Ajay Pratap, “Stable Matching Based Revenue Maximization for Federated Learning in UAV-Assisted WBANs,” in IEEE Transactions on Services Computing, vol. 17, no. 4, pp. 1835-1846, July-Aug. 2024. (IF: 5.5, Published)
3. **Moirangthem Biken Singh**, Himanshu Singh, and Ajay Pratap, “Energy-Efficient and Privacy-Preserving Blockchain Based Federated Learning for Smart Healthcare System,” in IEEE Transactions on Services Computing, vol. 17, no. 5, pp. 2392-2403, Sept.-Oct. 2024. (IF: 5.5, Published)
4. **Moirangthem Biken Singh**, Mihir Kumar Badkur, Dhruv Mishra, and Ajay Pratap, “Matching and Exchange-based Utility Maximization for Fog Computing-enabled Smart Healthcare,” in IEEE Transactions on Cloud Computing, 2024. (Under Review)
5. **Moirangthem Biken Singh** and Ajay Pratap, “Auction-Driven Utility Maximization for Multiple FL Systems in WBAN-based Smart Healthcare,” in IEEE Transactions on Sustainable Computing, 2024. (Under Review)

Journal Papers (Not Related to Thesis)

1. Saurabh Kumar Mishra, **Moirangthem Biken Singh**, Deewanshu Sharma, and Ajay Pratap, “Efficient Resource Allocation using Whale Optimization for Cell-free Massive MIMO Networks in 6G HetNet”, Physical Communication, Elsevier,

vol. 66, Oct. 2024, <https://doi.org/10.1016/j.phycom.2024.102467>. (IF: 2.0, Published)

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1. **Moirangthem Biken Singh**, Suraj Mahawa, Himanshu Singh, Shilpi Kumari, and Ajay Pratap, “Blockchain and Fog Access Point Integrated Healthcare System for Contact Tracing and Infection Probability Evaluation”, 2024 25th International Conference on Distributed Computing and Networking (ICDCN '24), IIT Madras, India, pp. 340–345. <https://doi.org/10.1145/3631461.3632090>.
2. **Moirangthem Biken Singh**, Himanshu Singh, and Ajay Pratap, “Criticality-Driven Scheduling for UAV-Assisted Remote Health Monitoring System”, 2023 17th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Jaipur, India, pp. 159-164, doi: 10.1109/ANTS59832.2023.10469426.
3. **Moirangthem Biken Singh**, Suraj Mahawar, Himanshu Singh, and Ajay Pratap, “COVID-19 Spread Detection and Controlling with Fog-based Infection Probability Evaluation Model”, 2023 24th International Conference on Distributed Computing and Networking (ICDCN '23), IIT Kharagpu, India, pp. 354–359. <https://doi.org/10.1145/3571306.3571435>.

Patents

1. Ajay Pratap, **Moirangthem Biken Singh**, and Himanshu Singh, “A Wireless Body Area Network Enabled Fog Computing System for Remote Health Monitoring”, Indian Patent, January 06, 2025. (Granted - Patent No.: 557449)
2. Ajay Pratap, **Moirangthem Biken Singh**, and Himanshu Singh, “A System and Method for Remote Health Monitoring based on Fog Computing Network”, Indian Patent (202511004523), January 20, 2025. (Filed)