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List of publications

Refereed journal papers

— Published papers

- **Rahul Mishra**, A. Gupta, H. P. Gupta, and T. Dutta, "A sensors based deep learning model for unseen locomotion mode identification using multiple semantic matrices," *IEEE Transactions on Mobile Computing (TMC)*, vol. 21, no. 3, pp. 799-810, 2022.

- **Rahul Mishra**, A. Gupta, and H. P. Gupta, "Locomotion mode recognition using sensory data with noisy labels: A deep learning approach," *IEEE Transactions on Mobile Computing (TMC)*, pp. 1-12, 2021 (Early access, doi: 10.1109/TMC.2021.3135878).

- **Rahul Mishra**, H. P. Gupta and T. Dutta, "A Road Health Monitoring System Using Sensors in Optimal Deep Neural Network," *IEEE Sensors Journal*, vol. 21, no. 14, pp. 15527-15534, 2021.

- **Rahul Mishra**, H. P. Gupta, P. Kumari, D. Y. Suh, and Md. J. Piran, "A Task Offloading and Reallocation Scheme for Passenger Assistance using Fog Computing", *IEEE Transactions on Network and Service Management (TNSM)* (Accepted and in press).

Refereed conference papers

— Regular paper

- **Rahul Mishra**, P. Kumari, H. P. Gupta, D. Shrivastava, T. Dutta, D. Y. Suh, and M. Jalil, *"A Game Theory-based Transportation System using Fog Computing for Passenger Assistance,"*, in *Proc. WoWMoM*, 2021, pp. 1-10.

— Poster or PhD forum

- **Rahul Mishra**, H. P. Gupta, and T. Dutta, "Noise-Resilient Federated Learning: Suppressing Noisy Labels in the Local Datasets of Participants", in *Proc. INFOCOM*, pp. 1-2, 2022. (Poster).

- **Rahul Mishra**, H. P. Gupta, and T. Dutta, "A Network Resource Aware Federated Learning Approach using Knowledge Distillation" in *Proc. INFOCOM*, pp. 1-2, 2021. (Poster)
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- **Rahul Mishra**, H. P. Gupta, and T. Dutta, "Poster Abstract: Teacher, Trainee, and Student based Knowledge Distillation Technique for Monitoring Indoor Activities " in *Proc. SenSys*, pp. 729-730, 2020. (Poster)

Other publications

- **Rahul Mishra**, H. P. Gupta, and T. Dutta, "Analysis, Modeling, and Representation of COVID-19 Spread: A Case Study on India," *IEEE Transactions on Computational Social Systems (TCSS)*, vol. 8, no. 4, pp. 964-973, 2021.
- P. Kumari, **Rahul Mishra**, H. P. Gupta, T. Dutta and S. K. Das, "An Energy Efficient Smart Metering System using Edge Computing in LoRa Network," *IEEE Transactions on Sustainable Computing (TSUSC)*", pp. 1-13, 2021 (Early access, doi: 10.1109/TSUSC.2021.3049705).
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Open dataset

- **Rahul Mishra**, H. P. Gupta, and T. Dutta, "Sensor Data of Mobile Sink for Precision Agriculture," *IEEE Dataport*, 2021. Available: http://dx.doi.org/10.21227/ympr-t542.
- A. Gupta, H. P. Gupta, T. Dutta, **Rahul Mishra**, and R. Kumar, "Accelerometer, Gyroscope, and Magnetometer Sensors based Data for Recognizing Handwritten Digits", *IEEE Dataport*, 2020. Available: http://dx.doi.org/10.21227/52d9-8y30.

Contribution in national/international projects

- "Water-to-Cloud", Agency: Tata Centre for Development at UChicago.
    - S. Chopade, H. P. Gupta, **Rahul Mishra**, P. Kumari and T. Dutta, "An Energy-Efficient River Water Pollution Monitoring System in Internet of Things," *IEEE Transactions on Green Communications and Networking (TGCN)*, vol. 5, no. 2, pp. 693-702, 2021.
    - S. Chopade, H. P. Gupta, **Rahul Mishra**, A. Oswal, P. Kumari and T. Dutta, "A Sensors based River Water Quality Assessment System using Deep Neural Network," *IEEE Internet of Things Journal (JIOT)*, pp. 1-10, 2021 (Early access, doi: 10.1109/JIOT.2021.3078892).
    *Contribution: Helped in implementation and paper writing.