

## FULL PUBLICATION LIST

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### GENERAL ARTICLES

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- A4. A. Mukherjee, S. Goswami, "Visualizing Graphs using PAJEK", PC Quest, Enterprise Solutions, Nov. 2010.
- A3. A. Mukherjee, "Creating VB Macros in MS Word", PC Quest, Developer, Dec. 2010.
- A2. A. Mukherjee, "Folder Manipulator in VB 6.0", Electronics for You, ISSN No. : 0013- 516x, Sep. 2011.
- A1. N. Pathak, A. Mukherjee, "NANOENGINEER- A Virtual Nanotechnology Lab", PC Quest, Hands On, Apr. 2013

### BOOKS

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- B2. S. Misra, A. Mukherjee, A. Roy, "Introduction to Industrial Internet of Things and Industry 4.0", CRC Press, USA (Forthcoming)
- B1. S. Misra, A. Mukherjee, A. Roy, "Introduction to IoT", Cambridge University Press, UK (In Press)

### JOURNAL PAPERS

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- J19. S. Misra, A. Roy, C. Roy, A. Mukherjee, "RACE: Dynamic Radio Protocol Selection for Energy-Constrained Wearable IoT Healthcare", IEEE Journal of Selected Areas in Communications (JSAC), *Special issue on Internet of Things for in-home health monitoring*, accepted- Apr. 2020. (IF=7.172)
- J18. N. Pathak, A. Mukherjee, S. Misra, "AerialBlocks: Blockchain-Enabled UAV Virtualization for Industrial IoT", IEEE Internet of Things Magazine, Special Issue on Blockchain-Enabled IIoT, IEEE, copyright transferred, Mar 2020.
- J17. N. Pathak, S. Misra, A. Mukherjee, A. Roy, A. Zomaya "UAV Virtualization for Enabling Heterogeneous and Persistent UAV-as-a-Service", Transactions on Vehicular Technology, IEEE, copyright transferred, Mar 2020. (IF=5.339)
- J16. A. Mukherjee, S. Misra, V.S.P.Chandra, N. S. Raghuwanshi, "ECoR: Energy-Aware Collaborative Routing for Task Offload in Sustainable UAV Swarms", Transactions on Sustainable Computing, IEEE (Early access), Feb. 2020. (IF=2.456) [Link](#)
- J15. D. Bhattacharya, S. Misra, N. Pathak, A. Mukherjee, "IDeA: IoT-Based Autonomous Aerial Demarcation and Path-planning for Precision Agriculture", Transactions on IoT, ACM, copyright transferred, Jan. 2020.
- J14. S. Misra, A. Mukherjee, "Phantom Networks: The Intangible Shoot-and-Scoot Communication Paradigm For Future Militaries", IEEE Communications Magazine, Feb. 2020. (IF=10.356) [Link](#)
- J13. A. Mukherjee, S. Misra, A. Sukrutha, N. S. Raghuwanshi "Distributed Aerial Processing for IoT-Based Edge UAV Swarms in Smart Farming", Computer Networks (SI), Elsevier, Published- Nov. 2019, DOI: <https://doi.org/10.1016/j.comnet.2019.107038>. (IF=3.03) [Link](#)

- J12. **A. Mukherjee**, S. Misra, N. S. Raghuwanshi, "A Survey of Unmanned Aerial Sensing Solutions in Precision Agriculture", *JNCA*, Elsevier, pp.102461, Oct 2019 DOI: 10.1016/j.jnca.2019.102461 (IF=5.273) [Link](#)
- J11. **A. Mukherjee**, S. Misra, A. Atrish, "MiND: Mind Networked Device Architecture for Attention-Gated Ambient Assisted Living Systems", *IEEE Systems Journal*, Accepted- Mar 2019. (IF=4.463) [Link](#)
- J10. **A. Mukherjee**, S. Misra, V. S. P. Chandra, M. Obaidat, "Resource-Optimized Multi-Armed Bandit Based Offload Path Selection in Edge UAV Swarms", *IEEE IoT Journal (Special Issue on Advanced Computational Technologies in Mobile Edge Computing for Internet of Things)*, Nov. 2018. (IF=9.515) [Link](#)
- J9. **A. Mukherjee**, S. Misra, N. S. Raghuwanshi, S. Mitra, "Blind Entity Identification for Agricultural IoT Deployments", *IEEE IoT Journal*, vol.6, no. 2, pp. 3156–3163, Accepted-Oct 2018. (IF=9.515) [Link](#)
- J8. S. Misra, **A. Mukherjee**, A. Roy, "Knowledge Discovery for Enabling Smart Internet-of-Things: A Survey", *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 8.6 (2018): e1276. (IF=2.541) [Link](#)
- J7. S. Misra, S. Goswami, C. Taneja, **A. Mukherjee**, Mohammad Obaidat, "A PKI Adapted Model for Secure Information Dissemination in Industrial Control and Automation 6LoWPANs", *IEEE ACCESS*, vol.3, no., pp.875,889, 2015, DOI: 10.1109/ACCESS.2015.2445817. (IF=4.095) [Link](#)
- J6. S. Goswami, S. Misra, C. Taneja, **A. Mukherjee**, "Design and Implementation Analysis of a Public Key Infrastructure- enabled Security Framework for Zigbee Sensor Network", *INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS*, Int. J. Commun. Syst. (2014), Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/dac.2893, Nov 2014. [Link](#)
- J5. U. N. Thakur, S. Saha, **A. Mukherjee**, "A Proposed Architecture for Residue Number System based 1D 5/3 Discrete Wavelet Transform using Filter Bank and Lifting Scheme." *International Journal of Computer Applications*, Vol. 90, No.14, 2014.
- J4. **A. Mukherjee**, N. Pathak, A. Roy, "Heart Murmur Detection using Fractal Analysis of Phonocardiograph Signals." *International Journal of Computer Applications*, Vol. 88, No.12, 2014.
- J3. A. Roy, **A. Mukherjee**, "An Analysis of the Viability of using Katz Algorithm in differentiating Normal Heart Sounds from Cardiac Murmurs." *American Journal of Electronics & Communication*, Vol. 1, No.2, pp. 32-36, 2014.
- J2. **A. Mukherjee**, S. Chatterjee, K. Chatpadhyay, K. K. Ghosh, "A comparative study on the accuracy of ecg detection for arrhythmia by different wavelet families." *IEMIJMT*, Vol. 2, No.1, pp. 93-98, 2012.
- J1. S. Goswami, **A. Mukherjee**, A. Gupta, M. Kharbanda, P. Soni. "Visualization of Relationship among Library Users based on Circulation Data". *Defence Scientific Information and Documentation Centre Journal of Library and Information Technology (DJLIT)*, Vol. 30, No. 2, ISSN No. : 0974-0643. March 2010. [Link](#)

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- C13. N. Pathak, **A. Mukherjee**, S. Misra, "Reconfigurable Wearables for an Interoperable Healthcare IoT Framework", *IEEE INFOCOM 2020 (selected for oral presentation)*, Jul 2020, Toronto, Canada.
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chain for Secure Software defined Networking in Smart Communities), (*selected for oral presentation*), Jul 2020, Toronto, Canada.

- C11. P. Deb, **A. Mukherjee**, S. Misra, A. Jamalipour “SkopEdge: A Traffic-Aware Edge-Based Auscultation Sound Monitor”, (*selected for oral presentation*), IEEE ICC 2020, Jun 2020, Dublin, Ireland.
- C10. S. Misra, **A. Mukherjee**, A. Rehman, N. S. Raghuwanshi, “ROSE: Random Opportunistic and Selective Exploration for Cooperative Edge Swarm of UAVs”, IEEE COMSNET 2020, Bengaluru, Jan 2020, India. [Link](#)
- C9. **A. Mukherjee**, S. Misra, N. Daw, D. Paul, “Fog-Based Visual Gesture Control and External Stabilization for micro-UAVs”, IEEE Wireless Communications and Networking Conference (WCNC), Marrakkeh, Morocco, Apr. 2019. [Link](#)
- C8. **A. Mukherjee**, N. Pathak, S. Misra, S. Mitra, “Predictive Intra-Edge Packet-Source Mapping in Agricultural Internet of Things”, IEEE Workshop on Communication, Computing, and Networking in Cyber Physical Systems, IEEE Globecom 2018, Abu Dhabi, Dec. 2018. [Link](#)
- C7. **A. Mukherjee**, S. Misra, N. S. Raghuwanshi, “SPA: A Sense-Predict-Actuate TDMA Latency Reduction Scheme in Networked Quadrotors”, IEEE Wireless Communications and Networking Conference (WCNC), Apr. 2018, Barcelona, Spain. [Link](#)
- C6. **A. Mukherjee**, S. Misra, P. Khandelwal, “R2D2: Rotating-turret 2D-scanning and Dead-reckoning for Remotely Operated Rovers over Resource Constrained Network Systems”, IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Dec. 2017, Bhubaneshwar, India. [Link](#)
- C5. **A. Mukherjee**, S. Misra, P. Mangrulkar, Muttukrishnan Rajarajan, and Yogachandran Rahulamathavan, “SmartARM: A Smartphone-based Group Activity Recognition and Monitoring Scheme for Military Applications”, IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Dec. 2017, Bhubaneshwar, India [Link](#)
- C4. S. Misra, **A. Mukherjee**, D. Pal, S. Dalal, “u-OCEAN: An Underwater Omnidirectional Communication Environment using Acoustic Sensor Nodes”, IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Dec. 2017, Bhubaneshwar, India [Link](#)
- C3. S. Goswami, S. Misra, C. Taneja, **A. Mukherjee**, “Securing Intra-communication in 6LoWPAN: A PKI Integrated Scheme”, IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 2014, vol., no., pp.1,5, 14-17 Dec. 2014, doi: 10.1109/ANTS.2014.7057265. [Link](#)
- C2. **A. Mukherjee**, K. K. Ghosh, “A Noise Independent Approach to QRS- Complex Detection Using CWT”, International Conference on Informatics, Electronics and Vision (ICIEV’13). Dhaka, Bangladesh. 18- 19 May 2013(Digital Object Identifier: 10.1109/ICIEV.2013.6572722), p. 1-5, 2013. [Link](#)
- C1. **A. Mukherjee**, K. K. Ghosh. “An Efficient Wavelet Analysis for ECG Signal Processing”, International Conference on Informatics, Electronics and Vision (ICIEV’12). Dhaka, Bangladesh. 18- 19 May 2012, IEEE Xplore (Digital Object Identifier: 10.1109/ICIEV.2012.6317419), p. 411-415, 2012. [Link](#)

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- Jx11. **A. Mukherjee**, P. K. Deb, S. Misra “THz Band Channel Modeling in the Presence of Node Mobility in Phantom Networks”, IEEE Transactions on Wireless Communications, **submission in May, 2020.** (IF=6.394)

- Jx10. P. K. Deb, **A. Mukherjee**, S. Misra “Phantom Networks – Channel Modeling for THz Band Aerial Nano Communication Networks”, IEEE Journal of Selected Areas in Communications (JSAC), **submission in Apr, 2020**. (IF=7.172)
- Jx9. N. Pathak, **A. Mukherjee**, S. Misra, “Service Provisioning-based Pricing Model for Re-configurable IoT Healthcare’, IEEE Transactions on Mobile Computing, **submission in Apr, 2020**. (IF=4.474)
- Jx8. N. Pathak, **A. Mukherjee**, S. Misra, “Enabling Edge-Based Interoperability and Scalability on IoT-Healthcare Platforms”, IEEE Transactions on Consumer Electronics, **submission in Apr, 2020**. (IF=2.083)
- Jx7. S. Misra, **A. Mukherjee**, K. Anand, “Phantom Networks: Establishing the Feasibility of Terahertz Aerial Nano-Communication Relaying”, Elsevier NanoComNet, **Under preparation for submission in May, 2020**.
- Jx6. S. Misra, S. Pal, **A. Mukherjee**, “BioBlocks: A Nano-scale Bio-Blockchain”, IEEE Communications Magazine, **submission in Apr, 2020**. (IF=10.3)
- Jx5. **A. Mukherjee**, N. Pathak, A. Roy, S. Misra, “TFDT: Temporally Forecasting Digital Twins for Scalable Industrial Wireless Sensor Networks”, IEEE Transactions on Industrial Informatics, **Submitted- Apr. 2020**. (IF=7.377)
- Jx4. S. Misra, S. K. Rachuri, P. K. Deb, **A. Mukherjee**, “Multi-Armed Bandit-based Decentralized Computation Offloading in Fog-Enabled IoV”, IEEE Transactions on Vehicular Technology, **Submitted- Feb 2020**. (IF=5.339)
- Jx3. S. Misra, **A. Mukherjee**, A. Roy, N. Saurabh, Y. Rahulamathavan, R. Mutthukrishnan, “Blockchain at the Edge: Feasibility Study on Resource-Constrained IoT Networks”, Transactions on Parallel and Distributed Systems, IEEE **Major Revisions (V2)- Feb 2020**. (IF=3.402)
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- Jx1. P. Deb, S. Misra, **A. Mukherjee**, “CEaaS: Constrained Encryption-as-a-Service in Fog-Enabled IoT”, Internet of Things Journal, IEEE **Submitted- Jan 2020**. (IF=9.515)

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- Cx4. **A. Mukherjee**, S. Misra, B. Reddy, A. Zomaya, “u-ECAL: UAV-Based Emergency Communication and Localization for Disaster Management”, IEEE GLOBECOM 2020, Taiwan, **Submitted- Apr. 2020**.
- Cx3. **A. Mukherjee**, F. Gazi, N. Pathak, S. Misra, “AquaStream: Multihop Multimedia Streaming Over Severely Resource-Constrained Underwater Acoustic Networks”, ACM SIGCOMM 2020, N.Y, USA, **Submitted- Feb. 2020**.
- Cx2. **A. Mukherjee**, P. Deb, S. Misra, “Loop-the-Loops: Timed Loop Storage Networks”, ACM SIGCOMM 2020, N.Y, USA, **Submitted- Feb. 2020**.
- Cx1. P. Deb, **A. Mukherjee**, S. Misra, “Distributed Continuous Wavelet Transforms on System of Resource-Constrained Systems”, ACM SIGCOMM 2020, N.Y, USA, **Submitted- Feb. 2020**.