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- **Date of Birth** 04th July 1969
- **Experience** Professor (Since February 2018)
25 Years of Teaching
- **Administrative Responsibilities** Head of Computer Science and Engineering Department
Head of Computer Center
Warden Hall of Residence
Member of Various Committee Constituted by the Institute
- **Academic Qualifications**
 - **Doctorate:** Computer Science and Engineering, Indian Institute of Technology, Kharagpur, 2005
 - **Postgraduate:** Computer Science, National Institute of Technology Rourkela, 2000
 - **Graduate:** Computer Science and Engineering, National Institute of Technology Rourkela, 1992
 - **Schooling:** Sainik School, Bhubaneswar
- **Sponsored Research Projects**
 - Design of Software Defined Control Plane for Optical Burst Switched Wavelength Division Multiplexing Networks, SERB. (Completed).
 - Energy Aware Protocol for Wireless Networks, MeitY. (Completed)
 - Optical Burst Switching in Wavelength Division Multiplexing Networks, DST. (Completed)
 - Application of Soft Computing Technique to Solve Routing and Wavelength Assignment (RWA) Problem in Optical Networks, Center for Soft Computing Research, ISI, Kolkata. (Completed)
- **PhD Thesis Supervised**
 - Niranjana Kumar Ray; *Techniques to enhance the lifetime of mobile ad hoc networks.* (Awarded, 2014)
 - Alekha Mishra; *Node Replica Detection in Wireless Sensor Networks.* (Awarded, 2014)

- Sourav Kanti Addya; *Virtual Machine Placement and Pricing on Cloud Data Center.* (Awarded, 2018)
- Ranjita Kumari Dash; *Thermal Management in Three Dimensional Network-on-Chip Based,* (Awarded, 2018)
- Madhusmita Mishra; *Analysis and Investigation of LDPC Coded OFDM Based Wireless and Optical Wireless Communication Systems.* (Awarded, 2019)
- Saroj Kumar Panigrahy; *Human Stress Analysis using Physiological Signals from Wireless Healthcare Sensor Network.* (Awarded, 2019)
- Ravi Sankar Barpanda; *Techniques for QoS Provisioning and Differentiation in OBS Networks.* (Awarded, 2020)
- Sahoo Sampa; *Performance Analysis of Real time Task Scheduling in Cloud System.* (Awarded, 2020)
- Srichandan Sobhanayak; *Energy Efficient Task Scheduling in Cloud Data Center.* (Awarded, 2020).
- Byomakesh Mahapatra; *Strategies for Load Balancing in Multitenant 5G CRAN Architecture.* (Awarded, 2021)
- Abinas Panda; *Software Defined Network.* (Ongoing)
- Srija Chakravarti; *Optical Burst Switching on Software Defined Network.* (Ongoing)
- Sushree Pradhan; *FDI Attack Detection and Mitigation in Cyber Physical System.* (Ongoing)
- Pooja Khobragade; *Applications of Blockchain in IoT.* (Ongoing)

- **Publications**

Journals

- [1] Sushree Padhan, and **Ashok Kumar Turuk; 2022;** "Design of False Data Injection Attacks in Cyber-Physical Systems", **Information Sciences**, Volume 608, Pages 825 - 843, August 2022. <https://doi.org/10.1016/j.ins.2022.06.082>. Impact Factor: 8.233
- [2] Anchal Ahalawat, Korra Sathya Babu, **Ashok Kumar Turuk** and Sanjeev Patel, **2022,** "A low-rate DDoS detection and mitigation for SDN using Renyi Entropy with Packet Drop", **Journal of Information Security and Applications**, Volume 68, August 2022. <https://doi.org/10.1016/j.jisa.2022.103212>. Impact Factor: 4.96
- [3] Prasenjit Maiti, Bibhudatta Sahoo, **Ashok Kumar Turuk**, Ajit Kumar, and Bong Jun Choi, **2022,** "Internet of Things applications placement to minimize latency in multi-tier fog computing framework", **ICT Express**, Volume 8, Issue 2, Pages 166-173, June 2022. <https://doi.org/10.1016/j.icte.2021.06.004>. Impact Factor: 4.754

- [4] Byomakesh Mahapatra, **Ashok Kumar Turuk**, and Sarat Kumar Patra, **2022**, "Multi-tier delay-aware load balancing strategy for 5G HC-RAN architecture, **Computer Communications**", Volume 187, Issue 1, Pages 144-154, April 2022, <https://doi.org/10.1016/j.comcom.2022.02.012>. Impact Factor: 5.047
- [5] Biraja Prasad Nayak, Lopamudra Hota, Arun Kumar, **Ashok Kumar Turuk**, and Peter H. J. Chong, **2022**, "Autonomous Vehicles: Resource Allocation, Security, and Data Privacy", **IEEE Transactions on Green Communications and Networking**, Volume 6, Issue 1, Pages 117-131, March 2022, doi: 10.1109/TGCN.2021.3110822. Impact Factor: 3.525
- [6] Sampa Sahoo, Shreeya Swagatika Sahoo, Bibhudatta Sahoo and **Ashok Kumar Turuk**, **2022**, "Design of An Authentication Scheme for Cloud-Based IoT Applications", February 2021, IETE Technical Review, Volume 39, Issue 2, Pages: 343 - 356, 2022. <https://doi.org/10.1080/02564602.2020.1854059>. Impact Factor: 1.932
- [7] Ravi Sankar Barpanda, **Ashok Kumar Turuk**, and Bibhudatta Sahoo, **2021**, "Analysis of wavelength reservation based quality of service differentiation in optical burst switching networks using Markov model", **Egyptian Informatics Journal**, Volume 22, Issue 3, Pages 363-372, September 2021. <https://doi.org/10.1016/j.eij.2016.06.006>. Impact Factor: 4.195
- [8] Sampa Sahoo, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, **2021** "A Learning Automata-Based Scheduling for Deadline Sensitive Task in The Cloud," in **IEEE Transactions on Services Computing**, Volume 14, Issue 6, Pages 1662-1674, 1 November - December 2021, <https://doi.org/10.1109/TSC.2019.2906870>. Impact Factor: 11.019
- [9] Vinod Kiran Kappala, Jayashree Pradhan, **Ashok Kumar Turuk**, **2021**, Vinicius N. H. Silva, Sudhan Majhi, and Santos Kumar Das, "A Point-to-Multi-Point Tracking System for FSO Communication", in **IEEE Transactions on Instrumentation and Measurement**, Volume 70, Pages 1-10, 2021, Art no. 5504110, <https://doi.org/10.1109/TIM.2021.3115202>. Impact Factor: 5.332
- [10] Prasenjit Maiti, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, **2021**, "Low Latency Aware Fog Nodes Placement in Internet of Things Service Infrastructure", **Journal of Circuits, Systems, and Computers**, Volume 31, No 1, 2022, 2021, <https://doi.org/10.1142/S0218126622500177>. Impact Factor: 1.278
- [11] Prasenjit Maiti, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, **2021**, "Low Latency Aware Fog Nodes Placement in Internet of Things Service Infrastructure", **Journal of Circuits, Systems, and Computers**, Volume 31, No. 01, Pages 2250017, 2021, <https://doi.org/10.1142/S0218126622500177>. Impact Factor: 1.278
- [12] Kappala Vinod Kiran, Subhanesh Perinbaraj, Jayashree Pradhan, Pradeep Kumar Mallick, **Ashok Kumar Turuk**, and Santos Kumar Das, **2020**, "Machine learning aided switching scheme for hybrid FSO/RF transmission", **Intelligent Decision Technologies**, Volume 14, Issue 4, Pages 529-536, January 2020, <https://doi.org/10.3233/IDT-190161>. Impact Factor: 1.235
- [13] Byomakesh Mahapatra, **Ashok Kumar Turuk**, and Sarat Kumar Patra, **2020**, "Exploring power consumption reduction in centralized radio access for energy-efficient centralized-Internet of Things implementation", **Transactions on Emerging Telecommunications Technologies**, Volume 31, Issue 10, Pages: e4045, October 2020, <https://doi.org/10.1002/ett.4045>. Impact Factor: 3.31
- [14] Byomakesh Mahapatra, **Ashok Kumar Turuk**, Sanket Kumar Panda, and Sarat Kumar Patra, **2020**, "Utilization-aware VB migration strategy for inter-BBU load balancing in 5G cloud radio access networks", **Computer Networks**, Volume 181, Issue 9, Pages: 107507, September 2020, 107507, <https://doi.org/10.1016/j.comnet.2020.107507>. Impact Factor: 5.493
- [15] Srichandan Sobhanayak, Kavita Jaiswal, **Ashok Kumar Turuk**, Bibhudatta Sahoo, Bhabendu Kumar Mohanta, and Debasish Jena, **2020**, "Container-based task scheduling for edge computing in IoT-cloud environment using improved HBF optimization algorithm",

- [16] Byomakesh Mahapatra, R.Kumar, **Ashok Kumar Turuk**, and **Sarat Kumar Patra**, 2019, 4 | Page "CLB: a multilevel co-operative load balancing algorithm for C-RAN architecture", **Digital Communications and Networks**, Volume 5, Issue 4, November 2019, Pages 308-316, <https://doi.org/10.1016/j.dcan.2019.10.003>. Impact Factor: 6.348
- [17] Sourav Kanti Addya, **Ashok Kumar Turuk**, Anurag Satpathy, Bibhudatta Sahoo, and Mahasweta Sarkar, 2019, "A Strategy for Live Migration of Virtual Machines in a Cloud Federation," in **IEEE Systems Journal**, Volume 13, Issue 3, Pages 2877-2887, Sept. 2019, <https://doi.org/10.1109/JSYST.2018.2872580>. Impact Factor: 4.802
- [18] Sampa Sahoo, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, 2019, "An eigenvalue-based edge infrastructure for cloud-based CDN", **International Journal of Communication Systems**, Volume 32, Issue 10, Pages e3966, <https://doi.org/10.1002/dac.3966>. 2019. Impact Factor: 1.882
- [19] Sourav Kanti Addya, **Ashok Kumar Turuk**, Bibhudatta Sahoo, Anurag Satpathy, and Mahasweta Sarkar, 2018, "A Game Theoretic Approach to Estimate Fair Cost of VM Placement in Cloud Data Center," in **IEEE Systems Journal**, Volume 12, Issue 4, Pages 3509-3518, Dec. 2018, <https://doi.org/10.1109/JSYST.2017.2776117>. Impact Factor: 4.802
- [20] Ranjita Dash, Amartya Majumdar, Vinod Pangracious, **Ashok Kumar Turuk**, and José L. Risco-Martín, 2018, "ATAR: An Adaptive Thermal-Aware Routing Algorithm for 3-D Network-on-Chip Systems," in **IEEE Transactions on Components, Packaging and Manufacturing Technology**, Volume 8, Issue 12, Pages 2122-2129, Dec. 2018, <https://doi.org/10.1109/TCPMT.2018.2842102>. Impact Factor: 1.922
- [21] Anurag Satpathy, Sourav Kanti Addya, **Ashok Kumar Turuk**, Banshidhar Majhi, and Gadadhar Sahoo, 2018, "Crow search based virtual machine placement strategy in cloud data centers with live migration", **Computers & Electrical Engineering**, Volume 69, July 2018, Pages 334-350. <https://doi.org/10.1016/j.compeleceng.2017.12.032>. Impact Factor: 4.152
- [22] Ravi Sankar Barpanda, **Ashok Kumar Turuk**, and Bibhudatta Sahoo, 2018, "QoS aware routing and wavelength allocation in optical burst switching networks using differential evolution optimization", **Digital Communications and Networks**, Volume 4, Issue 1, February 2018, Pages 3-12, <https://doi.org/10.1016/j.dcan.2017.09.002>. Impact Factor: 6.348
- [23] Suchismita Satpathy, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, 2018, "Sensing and Actuation as a Service Delivery Model in Cloud Edge centric Internet of Things", **Future Generation Computer Systems**, Volume 86, September 2018, Pages 281-296. <https://doi.org/10.1016/j.future.2018.04.015>. Impact Factor: 7.307
- [24] Srichandan Sobhanayak, **Ashok Kumar Turuk**, and Bibhudutta Sahoo, 2017, "A queuing approach to model power and performance trade-off with maintenance overhead of an infrastructure-as-a-service cloud", **International Journal of Communication Networks and Distributed Systems**, Volume 18, Issue 3-4, 2017, Pages 287-311, 10.1504/IJCND.2017.083826. Impact Factor: 1.54
- [25] Sourav Kanti Addya, **Ashok Kumar Turuk**, Bibhudatta Sahoo, Mahasweta Sarkar and Sanjay Kumar Biswash, 2017, "Simulated Annealing based VM Placement Strategy to Maximize the Profit of Cloud Service Providers", **Engineering Science and Technology, an International Journal**, Volume 20, Issue 4, August 2017, Pages 1249-1259, <https://doi.org/10.1016/j.jestch.2017.09.003>. Impact Factor: 5.155
- [26] Ranjita Kumari Dash, José L. Risco-Martín, **Ashok Kumar Turuk**, Vinod Pangracious, José L. Ayala, and Amartya Majumdar, 2017, "A Bio-Inspired Hybrid Thermal Management Approach for 3-D Network-on-Chip Systems," in **IEEE Transactions on NanoBioscience**, Volume 16,

- [27] Alekha Kumar Mishra, Asis Kumar Tripathy, Arun Kumar, and **Ashok Kumar Turuk, 2017**, "A Replica Detection Scheme Based on the Deviation in Distance Traveled Sliding Window for Wireless Sensor Networks", **Wireless Communications and Mobile Computing**, Volume 2017, Article ID 8457616, 8 pages, 2017, <https://doi.org/10.1155/2017/8457616>. Impact Factor: 2.146
- [28] Niranjan Kumar Ray, and **Ashok Kumar Turuk, 2017**, "A framework for post-disaster communication using wireless ad hoc networks", **Integration the VLSI Journal**, Volume 58, Pages: 274 - 285, 2017, <https://doi.org/10.1016/j.vlsi.2016.11.011>. Impact Factor: 1.345
- [29] Niranjan Kumar Ray and **Ashok Kumar Turuk, 2016**, "A Technique to Improve Network Lifetime in Mobile Ad Hoc Networks", **International Journal of Communication Systems**, Volume 29, Issue 5, Pages 840 - 858, March 2016. <https://doi.org/10.1002/dac.2784>. Impact Factor: 1.882
- [30] Niranjan Kumar Ray and **Ashok Kumar Turuk, 2016**, "A Hybrid Energy Efficient Protocol for Mobile Ad Hoc Networks," **Journal of Computer Networks and Communications**, Volume 2016, Article ID 2861904, 11 pages, 2016. <https://doi.org/10.1155/2016/2861904>.
- [31] Alekha Mishra and **Ashok Kumar Turuk, 2016**, "A comparative analysis of node replica detection schemes in wireless sensor networks", **Journal of Network and Computer Applications**, Volume 61, Pages 21-32, Feb 2016. <https://doi.org/10.1016/j.jnca.2015.12.001>. Impact Factor: 7.574
- [32] Madhusmita Mishra, Sarat Kumar Patra, and **Ashok Kumar Turuk, 2015**, "Re-jagged AR4JA LDPC codes and their applications", **Applied Optics**, Volume 54, Issue 12, Pages 3666-3671, 20 April 2015, <https://doi.org/10.1364/AO.54.003666>. Impact Factor: 1.905
- [33] Haroon Rashid, and **Ashok Kumar Turuk, 2015**, "Dead Reckoning Localization Technique for Mobile Wireless Sensor Networks", **IET Wireless Sensor System**, Volume 5, Issue 2, Pages 87 - 96, 2015. <https://doi.org/10.1049/iet-wss.2014.0043>, Impact Factor: 2.617
- [34] Alekha Kumar Mishra, and **Ashok Kumar Turuk, 2015**, "Residual Energy Based Replica Detection Scheme for Mobile Wireless Sensor Networks", **Security and Communication Networks Journal**, Wiley, Volume 8, Issue 4, Pages 637 - 648, 2015. <https://doi.org/10.1002/sec.1012>. Impact Factor: 1.968
- [35] Alekha Kumar Mishra and **Ashok Kumar Turuk, 2014**, "Node Coloring Based Replica Detection Technique in Wireless Sensor Networks", **Wireless Networks**, Springer, Vol. 20, Issue 8, pp. 2419 - 2435, Nov. 2014. <https://doi.org/10.1007/s11276-014-0751-9>. Impact Factor: 2.701
- [36] Alekha Kumar Mishra and **Ashok Kumar Turuk, 2013**, "A Zone Based Node Replica Detection Scheme For Wireless Sensor Network", **Wireless Personal Communication**, Volume 69, Issue 2, Pages 601 - 621, March 2013. <https://doi.org/10.1007/s11277-012-0592-8>. Impact Factor: 2.636
- [37] Alekha Kumar Mishra, and **Ashok Kumar Turuk, 2013**, "Efficient mechanism to exchange group membership identities among nodes in wireless sensor networks", **IET Wireless Sensor System**, Volume 3, Issue 4, Pages 289 - 297, December 2013, <https://doi.org/10.1049/iet-wss.2013.0028>. Impact Factor: 2.617
- [38] Haroon Rashid, and **Ashok Kumar Turuk, 2013**, "Localization of Wireless Sensor Networks Using a Single Anchor Node", **Wireless Personal Communications**, Volume 72, Issue 2, Pages 975 - 986, September 2013. [10.1007/s11277-013-1050-y](https://doi.org/10.1007/s11277-013-1050-y). Impact Factor: 2.636

- [39] Priyadarsini Sabut, and **Ashok Kumar Turuk, 2013**, "A Novel MAC Protocol for Ad Hoc Networks", International Journal of Ad Hoc and Ubiquitous Computing" Volume 14, Issue 3, Pages 191 - 199. <https://doi.org/10.1504/IJAHUC.2013.058236>. Impact Factor: 0.773
- [40] Niranjana Kumar Ray and Ashok Kumar Turuk, **2012**, "Performance Evaluation of Different Wireless Ad Hoc Routing Protocols", International Journal of Wireless and Mobile Networks, Volume 4, Issue 2, pp. 203 - 216, 2012.
- [41] Niranjana Kumar Ray, and **Ashok Kumar Turuk, 2012**, "LBTC: A Conceptual Energy Saving Framework for Mobile Ad hoc Networks", **Research Journal of Information Technology**, Volume 4, Issue 4, Pages 166 - 175, 2012. <https://doi.org/10.3923/rjit.2012.166.175>.
- [42] Niranjana Kumar Ray, Harsh Bardan Sharma and **Ashok Kumar Turuk, 2012**, "Network Lifetime Analysis of AODV, DSR and ZRP at Different Network Parameters" International Journal of Mobile Network Communications & Telematics (IJMNCT), 2(3), 2012. <https://doi.org/10.5121/ijmnct.2012.2304>.
- [43] Ashish V. Chandak, Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2011**, "Heuristic Task Scheduling Strategies in Computation Grid. International Journal of Advanced Networking and Application, Volume 02, Issue 05, Pages 804-810, 2011.
- [44] Ashish Chandak, Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2011**, "Performance Analysis of Adaptive Resource Clustering in Grid", **International Journal of Computer Application**, Volume 29, Issue 09, Pages 41-47, 2011. <https://doi.org/10.5120/3588-4973>.
- [45] Ashish Chandak, Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2011**, "A Novel Economic Based Resource Allocation Model for Grid", **International Journal of Advanced Research in Computer Science**, Volume 02, Issue 05, Pages 207-211, 2011. <http://dx.doi.org/10.26483/ijarcs.v2i5.783>
- [46] Ashish Chandak, Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2011**, "An Observation on Performance Analysis of Grid Scheduler", **International Journal of Computer Science and Technology**, Volume 02, Issue 04, Pages 516-520, 2011.
- [47] Sourav Kanti Addya, and **Ashok Kumar Turuk, 2010**, "A Technique For Communication Of Distance Node On Key Pre-distribution In Wireless Sensor Networks", **International Journal of Recent Trends in Engineering**, Academy Publishers, ACEEE, USA, 4(1), 87-92, ISSN: 2158-5555, (print) ISSN: 2158-5563 (online), 2010.
- [48] Niroj Kumar Pani and **Ashok Kumar Turuk, 2009**, "An Efficient Secure Zone Based Routing Protocol for Mobile Ad-Hoc Network", **International Journal of Secure Digital Information Age**, Volume - I, No - 2, Dec. 2009, pp. 86 - 93.
- [49] **Ashok Kumar Turuk** and Rajeev Kumar, **2006**, "A flexible contention resolution scheme for QoS provisioning in optical burst switching networks", **Computer Communications**, Volume 29, Issue 12, Pages 2361 - 2376, August 2006. <https://doi.org/10.1016/j.comcom.2006.03.009>, Impact Factor: 5.047
- [50] **Ashok Kumar Turuk** and Rajeev Kumar, **2005**, "QoS provisioning in a WDM ring network with tunable transceiver", **Journal of High Speed Networks**. Volume 14, Issue 4, Pages 317-339, 2005. Impact Factor: 0.596
- [51] **Ashok Kumar Turuk** and Rajeev Kumar, **2005**, "Delay-on-Demand: A signaling protocol to reduce blocking probability in optical burst-switch networks", **Photonic Network Communications**, Volume 10, Issue 2, Pages 253-266, 2005. <https://doi.org/10.1007/s11107-005-2488-y>. Impact Factor: 1.768
- [52] **Ashok Kumar Turuk** and Rajeev Kumar, **2004**, "A token-based distributed algorithm to support QoS in a WDM ring network", **Optics Communications**, Vol. 240/1-3, Pages 99-121, October 2004. <https://doi.org/10.1016/j.optcom.2004.06.022>. Impact Factor: 2.335

- [53] **Ashok Kumar Turuk** and Rajeev Kumar, 2004, "A scalable and collision-free MAC protocol for all optical ring networks". **Computer Communications**, Volume 27, Issue 15, Pages 1453-1463, September 2004. <https://doi.org/10.1016/j.comcom.2004.04.004>, Impact Factor: 5.047
- [54] **Ashok Kumar Turuk**, Rajeev Kumar and Ramamurthy Badrinath, 2004, "A token-based distributed algorithm for medium access in an optical ring network", **Optics Communications**, Volume 23, Issue 1-6, Pages 199-212, February 2004. <https://doi.org/10.1016/j.optcom.2003.12.012>, Impact Factor 2.335
- [55] Raja Datta, **Ashok Kumar Turuk**, Sujoy Ghose, Rajeev Kumar and Indranil Sengupta, 2004, "New Schemes for Connection Establishment in GPMLS Environment for WDM Networks," **International Journal on Wireless and Optical Communications (IJWOC)**, Volume 2, Issue 1, Pages 83-98, 2004. <https://doi.org/10.1142/S0219799504000234>.

Conference Proceedings

- [56] Byomakesh Mahapatra, Anuradha Verma, Deepika Gupta, Pankaj K. Sharma, and **Ashok Kumar Turuk**, 2021, "Traffic-Aware UAV Placement Strategies for Load Balancing in 5G Cellular Hotspots", 2021 Advanced Communication Technologies and Signal Processing (ACTS), 2021, Pages: 1-6, <https://doi.org/10.1109/ACTS53447.2021.9708242>.
- [57] Sampa Sahoo, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, 2021, "A Learning Automata-based Scheduling for Deadline Sensitive Task in The Cloud," 2021 IEEE World Congress on Services (SERVICES), September 2021, Pages 10-10, <https://doi.org/10.1109/SERVICES51467.2021.00021>.
- [58] Vinod Kiran Kappala, Jayashree Pradhan, Manish Sahu, **Ashok Kumar Turuk**, and Santos Kumar Das, 2021, "Performance Analysis of FSO for Different Modulation Techniques under Atmospheric Turbulence with Pointing Errors," 2021 2nd International Conference on Range Technology (ICORT), August 2021, Pages 1-5, <https://doi.org/10.1109/ICORT52730.2021.9581438>.
- [59] Srija Chakraborty, **Ashok Kumar Turuk**, and Bibhudatta Sahoo, 2020, "OBS network blocking probability prediction using ensemble technique," 2020 IEEE International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC), 2020, Pages 1-6, <https://doi.org/10.1109/iSSSC50941.2020.9358862>.
- [60] Srija Chakraborty, **Ashok Kumar Turuk**, and Bibhudatta Sahoo, 2020, "MELM-GRBFNN: A modified Extreme Learning Machine trained Gaussian Radial Basis Function Neural Network model for estimating blocking probability of OBS Network," 2020 IEEE REGION 10 CONFERENCE (TENCON), November 2020, Pages 478-483, <https://doi.org/10.1109/TENCON50793.2020.9293752>.
- [61] A. Sanila, Byomakesh Mahapatra, and **Ashok Kumar Turuk**, 2020, "Performance Evaluation of RPL protocol in a 6LoWPAN based Smart Home Environment," 2020 International Conference on Computer Science, Engineering and Applications (ICCSEA), March 2020, Pages 1-6, <https://doi.org/10.1109/ICCSEA49143.2020.9132942>.
- [62] Manoj Kumar Patra, Dimple Patel, Bibhudatta Sahoo, **Ashok Kumar Turuk**, 2020, "A Randomized Algorithm for Load Balancing in Containerized Cloud," 2020 10th International Conference on Cloud Computing, Data Science & Engineering (Confluence), January 2020, Pages 410-414, <https://doi.org/10.1109/Confluence47617.2020.9058147>
- [63] Manoj Kumar Patra; Dimple Patel; Bibhudatta Sahoo; and **Ashok Kumar Turuk**, 2020, "Game Theoretic Task Allocation to Reduce Energy Consumption in Containerized Cloud," 2020 10th International Conference on Cloud Computing, Data Science & Engineering (Confluence), January 2020, Pages 427-432, <https://doi.org/10.1109/Confluence47617.2020.9058041>.

- [64] Asit Sahoo; Shreeya Swagatika Sahoo; Sampa Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2020**, "An Interoperable ECC based Authentication and Key Agreement Scheme for IoT Environment," 2020 International Conference on COMmunication Systems & Networks (COMSNETS), January 2020, Pages 419-426, <https://doi.org/10.1109/COMSNETS48256.2020.9027361>.
- [65] Prasenjit Maiti; Hemant Kumar Apat; Mohammed Altowayti; Sampa Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2019**, "QoS-aware Service Provisioning in Heterogeneous Fog computing supporting IoT Applications," 2019 International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN), 2019, Pages 1-5, <https://doi.org/10.1109/ViTECoN.2019.8899417>
- [66] Srichandan Sobhanayak; and **Ashok Kumar Turuk, 2019**, "Energy-Efficient task scheduling in cloud data center- A temperature aware approach," 2019 3rd International conference on Electronics, Communication and Aerospace Technology (ICECA), 2019, Pages 1205-1208, <https://doi.org/10.1109/ICECA.2019.8822159>.
- [67] Sampa Sahoo; Shreeya Swagatika Sahoo; Prasenjit Maiti; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2019**, "A Lightweight Authentication Scheme for Cloud-Centric IoT Applications," 2019 6th International Conference on Signal Processing and Integrated Networks (SPIN), 2019, Pages 1024-1029, <https://doi.org/10.1109/SPIN.2019.8711757>.
- [68] Prasenjit Maiti; Hemant Kumar Apat; Ayush Kumar; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2019**, "Deployment of Multi-tier Fog Computing System for IoT Services in Smart City," 2019 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 2019, Pages 1-6, <https://doi.org/10.1109/ANTS47819.2019.9117921>
- [69] Abinas Panda; Siddharth Shankar Samal; **Ashok Kumar Turuk**; Aliva Panda; and Vummadi Chetty Venkatesh, **2019**, "Dynamic Hard Timeout based Flow Table Management in Openflow enabled SDN," 2019 International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN), 2019, Pages 1-6, <https://doi.org/10.1109/ViTECoN.2019.8899359>.
- [70] Byomakesh Mahapatra; Sanket Kumar Panda; **Ashok Kumar Turuk**; Bibhudatta Sahoo; and Sarat Kumar Patra, **2019**, LW-AKA: A Security Protocol for Integrated RFID and IoT Based Smart Home Security System," 2019 IEEE International Symposium on Smart Electronic Systems (iSES) (Formerly iNiS), 2019, Pages 331-336, <https://doi.org/10.1109/iSES47678.2019.00083>.
- [71] Prasenjit Maiti, Jaya Shukla, Bibhudutta Sahoo, and **Ashok Kumar Turuk, 2019**, "Mathematical modeling of QoS-aware fog computing architecture for IoT services, Advances in Intelligent Systems and Computing," Volume 814, Pages 13-21, 2019. International Conference on Emerging Technologies in Data Mining and Information Security, IEMIS 2018. https://doi.org/10.1007/978-981-13-1501-5_2
- [72] Gitanjali Behera; Saroj Kumar Panigrahy; and **Ashok Kumar Turuk, 2018**, A Biometric based Anonymous User Authentication Technique in Wireless Body Area Networks," 2018 International Conference on Communication, Computing and Internet of Things (IC3IoT), 2018, Pages 308-312, <https://doi.org/10.1109/IC3IoT.2018.8668193>
- [73] Prasenjit Maiti; Jaya Shukla; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, "QoS-aware fog nodes placement," 2018 4th International Conference on Recent Advances in Information Technology (RAIT), 2018, Pages 1-6, <https://doi.org/10.1109/RAIT.2018.8389043>
- [74] Byomakesh Mahapatra; Rahul Kumar; Shailesh Kumar; and **Ashok Kumar Turuk, 2018**, "A real time packet classification and allocation approach for C-RAN implementation in 5G network," 2018 4th International Conference on Recent Advances in Information Technology (RAIT), 2018, Pages 1-6, <https://doi.org/10.1109/RAIT.2018.8389092>

- [75] Shailesh Kumar; Byomakesh Mahapatra; Rahul Kumar; and **Ashok Kumar Turuk, 2018**, "Security and privacy solution for I-RFID based smart infrastructure health monitoring," 2018 Technologies for Smart-City Energy Security and Power (ICSESP), 2018, Pages 1-5, <https://doi.org/10.1109/ICSESP.2018.8376733>.
- [76] Y. J. Priyanka and **Ashok Kumar Turuk, 2018**, "RFID authentication protocol for mobile readers satisfying EPC-C1-GEN2 standard of passive tags," 2018 Technologies for Smart-City Energy Security and Power (ICSESP), 2018, Pages 1-5, <https://doi.org/10.1109/ICSESP.2018.8376724>.
- [77] Vinod Pagracious, Ranjitha Dash and **Ashok Kumar Turuk, 2018**, "3D-cool: Design and development of adaptive thermal-aware three-dimensional NoC-based multiprocessor chip," 2018 IEEE Symposium in Low-Power and High-Speed Chips (COOL CHIPS), 2018, Pages 1-3, <https://doi.org/10.1109/CoolChips.2018.8373074>
- [78] Amartya Majumdar, Ranjita Kumari Dash, Risco-Martín, José L, **Ashok Kumar Turuk, 2018**, "Emotar: A fast multi-objective thermal aware routing algorithm for three-dimensional network-on-chips," Simulation Series, Volume 50, Issue 10, Pages 133 - 144, 2018 50th Summer Computer Simulation Conference, SCSC 2018, Part of the 2018 Summer Simulation Multi-Conference, SummerSim 2018, Bordeaux, 9 July 2018 through 12 July 2018, <https://doi.org/10.22360/summersim.2018.scsc.021>
- [79] Suchismita Satpathy, Bibhudatta Sahoo; and **Ashok Kumar Turuk; 2018**, "A Quality Sentient System for Cloud Edge Centric Internet of Things," 2018 15th IEEE India Council International Conference, Pages 1 -6, <https://doi.org/10.1109/INDICON45594.2018.8987060>
- [80] Byomakesh Mahapatra; Rahul Kumar; Shailesh Kumar; **Ashok Kumar Turuk, 2018**, "A Heterogeneous Load Balancing Approach in Centralized BBU-Pool of C-RAN Architecture," 2018 3rd International Conference for Convergence in Technology (I2CT), 2018, Pages 1-5, <https://doi.org/10.1109/I2CT.2018.8529505>
- [81] Kavita Jaiswal; Srichandan Sobhanayak; **Ashok Kumar Turuk**; Sahoo L Bibhudatta; Bhabendu Kumar Mohanta, and Debasis Jena, **2018**, "An IoT-Cloud Based Smart Healthcare Monitoring System Using Container Based Virtual Environment in Edge Device," 2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), 2018, Pages 1-7, <https://doi.org/10.1109/ICETIETR.2018.8529141>.
- [82] Sampa Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, "An Energy-Efficient Scheduling Framework for Cloud Using Learning Automata," 2018 9th International Conference on Computing, Communication and Networking Technologies (ICCCNT), 2018, Pages 1-5, <https://doi.org/10.1109/ICCCNT.2018.8493692>.
- [83] Awaneesh Kumar Yadav, Byomakesh Mahapatra, Shailesh Kumar, and **Ashok Kumar Turuk, 2018**, "Multi-layer Authentication and Key Agreement Protocol for Secured Data Transmission in Cloud-RAN," (2018) INDICON 2018 - 15th IEEE India Council International Conference, <https://doi.org/10.1109/INDICON45594.2018.8987176>
- [84] Prasenjit Maiti; Kshira Sagar Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, "Smart Gateway Based Multi-Tier Service-Oriented Fog Computing Architecture for Achieving Ultra-Low Latency," 2018 International Conference on Information Technology (ICIT), 2018, Pages 278-283, <https://doi.org/10.1109/ICIT.2018.00063>.
- [85] Byomakesh Mahapatra; **Ashok Kumar Turuk**; Niranjana Ray; Awneesh Kumar Yadav, **2018**, "H-RAN: An Approach Toward Cloud-RAN Load Balancing," 2018 International Conference on Information Technology (ICIT), 2018, Pages 216-220, <https://doi.org/10.1109/ICIT.2018.00052>.
- [86] Sampa Sahoo; Sahil Kumar Sahu; Tanmay Kumar Rath; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, "TCA: A Multi Constraint Real-Time Task Scheduling Algorithm for Heterogeneous Cloud Environment," 2018 International Conference on Information Technology (ICIT), 2018, Pages 132-136, <https://doi.org/10.1109/ICIT.2018.00036>.

- [87] Suchismita Satpathy; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, "RoSA: Reputation of Service Assessment for Cloud Edge centric Internet of Things," 2018 IEEE 13th International Conference on Industrial and Information Systems (ICIIS), 2018, Pages 297-302, <https://doi.org/10.1109/ICIINFS.2018.8721321>
- [88] Byomakesh Mahapatra; Rahul Kumar; **Ashok Kumar Turuk**; and Sarat Kumar Patra, **2018**, "SC-RAN: An Energy-Efficient Solution Toward C-IoT Implementation," 2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 2018, Pages 1-6, <https://doi.org/10.1109/ANTS.2018.8710158>.
- [89] Sampa Sahoo; Ankit Pattanayak; Kshira Sagar Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, MCSA: A Multi-constraint Scheduling Algorithm for Real-time Task in Virtualized Cloud, 2018 - 15th IEEE India Council International Conference (INDICON), 2018, Pages 1-6, <https://doi.org/10.1109/INDICON45594.2018.8987045>
- [90] Sampa Sahoo; Maneesha Nidhi; Kshira Sagar Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2017**, "Video delivery services in media cloud with abandonment: An analytical approach," 2017 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 2017, Pages 1-6, <https://doi.org/10.1109/ANTS.2017.8384102>
- [91] Kiran, Kappala Vinod; Kumar, Vikram; **Ashok Kumar Turuk**; and Santos Kumar Das, **2017**, "Estimation of link margin for performance analysis of FSO network," Communications in Computer and Information Science, Volume 827, Pages 444 - 458, 2018 3rd International Conference on Next Generation Computing Technologies, NGCT 2017Dehradun30 October 2017through 31 October https://doi.org/10.1007/978-981-10-8657-1_34
- [92] Juhi Verma; Srichandan Sobhanayak; Suraj Sharma; **Ashok Kumar Turuk**; and Bibhudatta Sahoo, **2017**, "Bacteria foraging based task scheduling algorithm in cloud computing environment," 2017 International Conference on Computing, Communication and Automation (ICCCA), 2017, Pages 777-782, <https://doi.org/10.1109/CCAA.2017.8229901>.
- [93] Sampa Sahoo, Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2017**, "RT-PUSH: A VM fault detector for deadline-based tasks in cloud," ACM International Conference Proceeding Series, Pages 196 - 201, 24 November 2017, 3rd International Conference on Communication and Information Processing, ICCIP 2017, Tokyo, 24 November 2017 through 26 November 2017, <https://doi.org/10.1145/3162957.3163026>.
- [94] Soumya Ranjan Moharana; Vijay Kumar Jha; Anurag Satpathy; Sourav Kanti Addya; and **Ashok Kumar Turuk**, Banshidhar Majhi, **2017**, "Secure key-distribution in IoT cloud networks," 2017 Third International Conference on Sensing, Signal Processing and Security (ICSSS), 2017, Pages 197-202, <https://doi.org/10.1109/SSPS.2017.8071591>
- [95] Prasenjit Maiti; Bibhudatta Sahoo; **Ashok Kumar Turuk**; and Suchismita Satpathy, **2017**, "Sensors data collection architecture in the Internet of Mobile Things as a service (IoMTaaS) platform," 2017 International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), 2017, Pages 578-582, <https://doi.org/10.1109/I-SMAC.2017.8058245>
- [96] Anurag Satpathy; Sourav Kanti Addya; **Ashok Kumar Turuk**; Banshidhar Majhi; and Gadadhar Sahoo, **2017**, "A resource aware VM placement strategy in cloud data centers based on crow search algorithm," 2017 4th International Conference on Advanced Computing and Communication Systems (ICACCS), 2017, Pages 1-6, <https://doi.org/10.1109/ICACCS.2017.8014639>
- [97] Kappala Vinod Kiran; Shikha Rathore; **Ashok Kumar Turuk**; Santos Kumar Das, **2017**, "Development of a Hybrid FSO/RF System during Link Misalignment," 2017 International Conference on Networking and Network Applications (NaNA), 2017, Pages 138-140, <https://doi.org/10.1109/NaNA.2017.63>

- [98] Amartya Majumdar; Ranjita Dash; Vinod Pangracious; and **Ashok Kumar Turuk**, 2017, "An efficient multi-objective thermal aware routing algorithm 3D network-on-chips," 2017 International Conference on Electrical and Computing Technologies and Applications (ICECTA), 2017, Pages 1-4, <https://doi.org/10.1109/ICECTA.2017.8251970>
- [99] Kappala Vinod Kiran; Vikram Kumar; **Ashok Kumar Turuk**; and Santos Kumar Das, 2017, "Quality Aware Design and Analysis of FSO Link in Wireless Optical System," 2017 14th IEEE India Council International Conference (INDICON), 2017, pp. 1-6, doi: 10.1109/INDICON.2017.8487629.
- [100] Byomakesh Mahapatra; **Ashok Kumar Turuk**; Sarat Kumar Patra; and Rahul Kumar, 2017, "Optimal Placement of Centralized BBU (C-BBU) for Fronthaul and Backhaul Optimization in Cloud-RAN Network," 2017 International Conference on Information Technology (ICIT), 2017, Pages 107-112, <https://doi.org/10.1109/ICIT.2017.36>.
- [101] Prasenjit Maiti; Jaya Shukla; Bibhudatta Sahoo; and **Ashok Kumar Turuk**, 2017, "Efficient Data Collection for IoT Services in Edge Computing Environment," 2017 International Conference on Information Technology (ICIT), 2017, Pages 101-106, <https://doi.org/10.1109/ICIT.2017.40>
- [102] Ranjita Kumari Dash, Jose' L. Risco-Martín, **Ashok Kumar Turuk**, Vinod Pangracious, Jose' L. Ayala, and Amartya Majumdar, 2017, "Thermal Management in Three Dimensional Network-on Chip Using Bio-Inspired Liquid Channel Placement," Simulation Series Volume 49, Issue 9, Pages 376 - 387, 2017 49th Summer Computer Simulation Conference, SCSC 2017, Part of the 2017 Summer Simulation Multi-Conference, SummerSim 2017, Bellevue, 9 July 2017 through 12 July 2017.
- [103] Ranjita Kumari Dash, Jose' L. Risco-Martín, **Ashok Kumar Turuk**, Vinod Pangracious, Jose' L. Ayala, and Amartya Majumdar, 2017, "Thermal Management in 3D Homogeneous NoC Systems Using Optimized Placement of Liquid Microchannels," 2017 IEEE 11th International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoc), 2017, Pages 37-44, <https://doi.org/10.1109/MCSoc.2017.23>.
- [104] Ranjita Kumari Dash, Jose' L. Risco-Martín, **Ashok Kumar Turuk**, and Jose' L. Ayala, 2016, "Bio-inspired thermal management techniques for three dimensional heterogeneous stacked network-on-chip systems," 2016 International Conference on Bio-engineering for Smart Technologies (BioSMART), 2016, Pages 1-4, <https://doi.org/10.1109/BIOSMART.2016.7835601>.
- [105] Byomakesh Mohapatra, **Ashok Kumar Turuk**, Sarat Kumar Patra, and Prasenjit Maiti, 2016, "Optimization in fronthaul and backhaul network for cloud RAN (C-RAN): Design and deployment challenges," 2016 International Conference on Signal Processing, Communication, Power and Embedded System (SCOPEs), 2016, Pages 1009-1014, <https://doi.org/10.1109/SCOPEs.2016.7955593>.
- [106] Prasenjit Maiti, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, 2016, "Service oriented fault monitoring in Internet of Things device management," 2016 International Conference on Signal Processing, Communication, Power and Embedded System (SCOPEs), 2016, Pages 243-248, <https://doi.org/10.1109/SCOPEs.2016.7955828>
- [107] Ranjita Kumari Dash, Jose' L. Risco-Martín, **Ashok Kumar Turuk**, and Jose' L. Ayala, 2016, "A Thermal Driven Genetic Algorithm for Three Dimensional Network-on-Chip Systems," Simulation Series, Volume 48, Issue 9, Pages 335 - 342, 2016 48th Summer Computer Simulation Conference, SCSC 2016, Part of the 2016 Summer Simulation Multi-Conference, SummerSim 2016 Montreal, 24 July 2016 through 27 July 2016, <https://doi.org/10.22360/SummerSim.2016.SCSC.056>
- [108] Madhusmita Mishra, Sarat Kumar Patra, **Ashok Kumar Turuk**, and Pabitra Mohan Khilar, 2016, "Re-jagged AR4JA LDPC coded outdoor optical wireless communication system," 2016 IEEE Region 10 Conference (TENCON), 2016, Pages 1933-1936, <https://doi.org/10.1109/TENCON.2016.7848359>.

- [109] Sourav Kanti Addaya, **Ashok Kumar Turuk**, Bibhudutta Sahoo, and Maheswata Sarkar, **2015**, "A hybrid queuing model for Virtual Machine placement in cloud data center," 2015 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS) 2015; Pages 1-3, <https://doi.org/10.1109/ANTS.2015.7413642>
- [110] Srichandan Sobhanayak; **Ashok Kumar Turuk**; and Bibhudatta Sahoo, **2015**, "Analytic modeling of VM failure and repair in cloud datacenter," TENCON 2015 - 2015 IEEE Region 10 Conference, 2015, Pages 1-6, <https://doi.org/10.1109/TENCON.2015.7373125>
- [111] A K Paul, Sourav Kanti Addaya, Bibhudutta Sahoo, and **Ashok Kumar Turuk**, **2014**, "Application of greedy algorithms to Virtual Machine Distribution across Data Centers," 2014 Annual IEEE India Conference (INDICON), 2014, Pages 1-6, <https://doi.org/10.1109/INDICON.2014.7030633>.
- [112] Ravi Sankar Barpanda; **Ashok Kumar Turuk**; and Bibhudatta Sahoo, **2014**, "A Review of Optical Burst Switching in Wavelength Division Multiplexing Networks," 2014 International Conference on Information Technology, 2014, Pages 142-147, <https://doi.org/10.1109/ICIT.2014.50>.
- [113] Ram Prasad Mohanty, **Ashok Kumar Turuk**, and Bibhudutta Sahoo, **2014**, "Architecting Fabricated Implant in Interconnect for Multi-core Processor," 2nd International Conference on Advanced Computing, Networking and Informatics (ICACN 2014); Kolkata; India; 24 June 2014 through 26 June 2014; Code 106721, Volume 28, Issue 2, Pages 517-524, https://doi.org/10.1007/978-3-319-07350-7_57
- [114] Ram Prasad Mohanty, **Ashok Kumar Turuk**, and Bibhudutta Sahoo, 2013, "Performance Evaluation of Multi-core Processors with Varied Interconnect Networks," 2013 2nd International Conference on Advanced Computing, Networking and Security, 2013, Pages 7-11, <https://doi.org/10.1109/ADCONS.2013.40>.
- [115] Madhusmita Mishra, Sarat Kumar Patra, and **Ashok Kumar Turuk**, **2012**, "Performance of power efficient LDPC coded OFDM over AWGN channel," 2012 1st International Conference on Recent Advances in Information Technology (RAIT), 2012, Pages 185-191, <https://doi.org/10.1109/RAIT.2012.6194503>
- [116] Alekha Kumar Mishra, and **Ashok Kumar Turuk**, **2011**, "A Key Renewal Model for Wireless Sensor Network Under Node Capture Attack," 2011 Fourth International Conference on Emerging Trends in Engineering & Technology, 2011, Pages 301-305, <https://doi.org/10.1109/ICETET.2011.18>
- [117] Alekha Kumar Mishra, and **Ashok Kumar Turuk**, **2011**, "Adversary Information Gathering Model for Node Capture Attack in Wireless Sensor Networks," 2011 International Conference on Devices and Communications (ICDeCom), 2011, Pages 1-5, <https://doi.org/10.1109/ICDECOM.2011.5738552>.
- [118] L K Basyani, and **Ashok Kumar Turuk**, **2011**, "A Survey on Selective Forwarding Attack in Wireless Sensor Networks," 2011 International Conference on Devices and Communications (ICDeCom), 2011, Pages 1-5, <https://doi.org/10.1109/ICDECOM.2011.5738547>.
- [119] Saroj Kumar Panigrahy, Sanjay Kumar Jena, and **Ashok Kumar Turuk**, **2011**, "Security in Bluetooth, RFID and wireless sensor networks," International Conference on Communication, Computing and Security (ICCCS 2011); Rourkela, Odisha; India; 12 February 2011 through 14 February 2011; Code 84349, 2011, Pages 628-633, <https://doi.org/10.1145/1947940.1948071>
- [120] Rabi Sankar Barpanda, **Ashok Kumar Turuk**, and Bibhudutta Sahoo, **2011**, "Genetic Algorithm techniques to solve Routing and Wavelength Assignment problem in Wavelength Division Multiplexing all-optical networks," 2011 Third International Conference on

- [121] Rabi Sankar Barpanda, **Ashok Kumar Turuk**, Bibhudutta Sahoo, and Banshidhar Majhi, **2011**, "A genetic algorithm way of solving RWA problem in all optical WDM networks," 2nd International Conference on Advances in Computing, Communication and Control (ICAC3 2011); Volume 125, CCIS, 2011, Pages 137-142, https://doi.org/10.1007/978-3-642-18440-6_17
- [122] Niranjana Kumar Ray and **Ashok Kumar Turuk**, **2011**, " A Framework for Disaster Management using Wireless Ad Hoc Networks," International Conference on Communication, Computing and Security (ICCCS) 2011. Pages 138-141, <https://doi.org/10.1145/1947940.1947970>
- [123] Niranjana Kumar Ray and **Ashok Kumar Turuk**, **2011**, "Analysis of Topology Control Algorithms in Ad hoc and Sensor Networks," International Conference on Challenges and Applications of Mathematics in Science and Technology (CAMIST), 2011.
- [124] Ashish Chandak, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, **2011**, "Efficient task scheduling using mobile grid," 2011 International Conference on Recent Trends in Information Technology (ICRTIT), 2011, Pages 1255-1258, <https://doi.org/10.1109/ICRTIT.2011.5972343>.
- [125] Ashish Chandak, Bibhudatta Sahoo, and Ashok Kumar Turuk, **2011**, "An Overview of Task Scheduling and Performance Metrics in Grid," National Conference on Computing, Communication and Sensor Networks (CCSN), October 2011.
- [126] Niranjana Kumar Ray, T Vijeesh and **Ashok Kumar Turuk**, **2010**, "SPC: The Selective Prioritized Clustering Algorithm for MANETs," 2010 International Symposium on Electronic System Design (ISED), 2010. Pages 66-70, <https://doi.org/10.1109/ISED.2010.21>
- [127] Niranjana Kumar Ray and **Ashok Kumar Turuk**, **2010**, "Energy Efficient Techniques for Wireless Ad Hoc Networks," International joint conference on information and communication technology (IJcICT-2010).
- [128] Rabi Sankar Barpanda, **Ashok Kumar Turuk**, Bibhudutta Sahoo, and Banshidhar Majhi, **2010**, "Genetic algorithm approaches to solve RWA problem in WDM optical networks," 1st Swarm, Evolutionary and Memetic Computing Conference (SEMCCO 2010); Lecture Notes in Computer Science, Volume 6466, 2010, Pages 599-606, https://doi.org/10.1007/978-3-642-17563-3_70
- [129] Rabi Sankar Barpanda, **Ashok Kumar Turuk**, Bibhudutta Sahoo, and Banshidhar Majhi, **2010**, "Solving large problem instances of the RWA problem using genetic algorithms," 2010 5th International Conference on Industrial and Information Systems (ICIIS 2010); Pages 41-46, <https://doi.org/10.1109/ICIINFS.2010.5578737>
- [130] Mrinal Nandi, **Ashok Kumar Turuk**, Dilip Kumar Puthal, and S Dutta, **2009**, "Best Fit Void Filling Algorithm in Optical Burst Switching Networks," 2009 Second International Conference on Emerging Trends in Engineering & Technology, 2009, Pages 609-614, <https://doi.org/10.1109/ICETET.2009.46>.
- [131] Mrinal Nandi, **Ashok Kumar Turuk**, Dilip Kumar Puthal, and S Dutta, **2009**, "Best Fit Void Filling Algorithm in Optical Burst Switching Networks," 2009 Second International Conference on Emerging Trends in Engineering and Technology (ICETET), 2009, Pages 609 - 614, <https://doi.org/10.1109/ICETET.2009.46>
- [132] Rabi Shankar Barpanda, **Ashok Kumar Turuk**, and Bibhudatta Sahoo, **2009**, "A new cost function to solve RWA Problem in wavelength routed optical network using Genetic Algorithms," 2009 World Congress on Nature & Biologically Inspired Computing (NaBIC), 2009, Pages 1297-1302, <https://doi.org/10.1109/NABIC.2009.5393762>.

- [133] Niranjana Kumar Ray and **Ashok Kumar Turuk, 2009**, "A review on energy efficient MAC protocols for wireless LANs," 2009 International Conference on Industrial and Information Systems (ICIIS), 2009, Pages 137-142, <https://doi.org/10.1109/ICIINFS.2009.5429875>
- [134] Pushpindra Chandra and **Ashok Kumar Turuk**, and Bibhudutta Sahoo, **2009**, "Survey on Optical Burst Switching in WDM Networks," 2009 International Conference on Industrial and Information Systems (ICIIS), 2009, Pages 83-88, <https://doi.org/10.1109/ICIINFS.2009.5429885>
- [135] Suchismita Rout, **Ashok Kumar Turuk** and Bibhudatta Sahoo, "Energy Efficiency in Wireless Ad Hoc Networks using Clustering", In the Proceeding of 12th International Conference on Information Technology (ICIT-2009), Bhubaneswar, India, 21st - 24th December, 2009.
- [136] Niranjana Kumar Ray and **Ashok Kumar Turuk, 2009**, "A Survey on Energy-Aware MAC for Wireless Network," In the Proceeding of 12th International Conference on Information Technology (ICIT-2009), Bhubaneswar, 21st - 24th December, 2009.
- [137] Suchismita Rout, **Ashok Kumar Turuk** and Bibhudatta Sahoo, **2009**, "A Study of Different Energy Aware Metrics in Ad Hoc Networks," In the Proceeding of Recent Advances on Information Technology (RAIT-2009), Indian School of Mines University, Dhanbad, Jharkhand, pp. 17 - 24, 6th - 7th February, 2009.
- [138] Suchismita Rout, **Ashok Kumar Turuk** and Bibhudatta Sahoo, **2009**, "Energy Efficiency in Wireless Networks: Through Alternate Path Routing," In the proceeding of Fourth Innovative Conference on Embedded Systems, Mobile Communication and Computing (ICEMC2-2009), Bangalore, India, 27th - 29th July, 2009, pp. 3 - 8.
- [139] Dilip Kumar Puthal, Bibhudutta Sahoo, **Ashok Kumar Turuk**, and Mrinal Nandi, **2008**, "Modified MAC for priority traffic with slow decrease of contention window and reservation based packet forwarding in IEEE 802.11 for QoS provisioning," 2008 International Conference on Information Technology (ICIT 2008); Pages 195-196. <https://doi.org/10.1109/ICIT.2008.44>
- [140] Mrinal Nandi, **Ashok Kumar Turuk**, and Bibhudutta Sahoo, **2008**, "A new contention avoidance scheme in optical burst switch network," 2008 16th IEEE International Conference on Networks, 2008, Pages 1-5, <https://doi.org/10.1109/ICON.2008.4772591>.
- [141] Dillip Kumar Puthal, Bibhudutta Sahoo, **Ashok Kumar Turuk**, and Mrinal Nandi, **2008**, "Modified MAC for Priority Traffic with Slow Decrease of Contention Window and Reservation Based Packet Forwarding in IEEE 802.11 for QoS Provisioning," 2008 International Conference on Information Technology, 2008, pp. 195-196, <https://doi.org/10.1109/ICIT.2008.44>.
- [142] Mrinal Nandi and **Ashok Kumar Turuk, 2008**, "A Comparative Study of Different Optical Burst Switching Scheduling Algorithms Under Self-Similar Traffic," National Conference on Recent Trends in Information Systems (ReTIS-08), pp. 196 - 199, February 7 -9, 2008, Kolkata, India.
- [143] Mrinal Nandi and **Ashok Kumar Turuk, 2008**, "Analysis of Wavelength Conversion and Deflection Routing in Optical Burst Switched Network," 1st International Conference on Advances in Computing (ICAC 2008), 21 - 22 February, 2008, Chiklia, India.
- [144] R S Mangrulkar, **Ashok Kumar Turuk**, and Pallavi V Chavan, **2008**, "A hybrid Approach for On-Demand and Table Driven Routing Protocol for Ad Hoc Network," 1st International Conference on Advances in Computing (ICAC 2008), 21 - 22 February 2008, Chiklia, India.
- [145] Mrinal Nandi and **Ashok Kumar Turuk, 2008**, "A Novel Channel Scheduling Algorithm in Optical Burst Switching Network'', International Conference on Sensors, Signal

- [146] Arun Kumar and **Ashok Kumar Turuk**, 2007, "Simulation of Sensor Network Protocols and their Comparison," International Conference on Sensors and Related Networks (SENNET'07), VIT University, India, Dec 12 -14, 2007, pp 448 - 453.
- [147] **Ashok Kumar Turuk** and Rajeev Kumar, 2004, "A distributed contention resolution scheme to reduce blocking probability in optical burst-switch networks," Int. Workshop on Distributed Computing (IWDC-04). Kolkata, December 2004, Lecture Notes in Computer Science (LNCS), Volume 3326, 2004, Pages 361-372
- [148] **Ashok Kumar Turuk** and Rajeev Kumar, 2004, "A novel scheme to reduce burst-loss and provide QoS in optical burst-switch networks," In Proc. High Performance Computing Conf. (HiPC - 04), Bangalore, December 2004. Lecture Notes in Computer Science (LNCS), Volume 3296, 2004, Pages 309-318.
- [149] **Ashok Kumar Turuk** and Rajeev Kumar, 2004, "A Novel Approach to Contention Resolution in Optical Burst-Switch Networks". In Proc. Distributed Processing & Networking Conference. (DPN-04), IIT, Kharagpur, pp. 38 -- 43, 2004.
- [150] **Ashok Kumar Turuk**, and Rajeev Kumar, 2004, "A distributed contention resolution scheme to reduce blocking probability in optical burst switching networks," Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Volume 3326, Pages 361 - 372, 2004, https://doi.org/10.1007/978-3-540-30536-1_40.
- [151] Ashok K. Turuk, and Rajeev Kumar, 2004, "A novel scheme to reduce burst-loss and provide QoS in optical burst switching networks," High Performance Computing - HiPC 2004, Lecture Notes in Computer Science Volume 3296, Pages 309 - 318, 2004, https://doi.org/10.1007/978-3-540-30474-6_35.

Publications in Book Chapter

- [1] Asutosh Kumar Biswal, Prasenjit Maiti, Sodyam Bebartha, Bibhudatta Sahoo, and **Ashok Kumar Turuk**, 2020, "Authenticating IoT Devices with Blockchain," In: Kim, S., Deka, G. (eds) Advanced Applications of Blockchain Technology. Studies in Big Data, Volume 60, Pages 177-205, Springer, Singapore. 2020. https://doi.org/10.1007/978-981-13-8775-3_9
- [2] Sampa Sahoo, Ipsita Parida, Sambit Kumar Mishra, Bibhudutta Sahoo, and **Ashok Kumar Turuk**, 2019, "Resource allocation for video transcoding in the multimedia cloud," Advances in Intelligent Systems and Computing, Volume 707, Pages 525-532. https://doi.org/10.1007/978-981-10-8639-7_55
- [3] Saroj Kumar Panigrahy, Bibhu Prasad Dash, Korra Sathya Babu, **Ashok Kumar Turuk**, and Sanjay Kumar Jena, 2019, "Comparative study of ecg-based key agreement schemes in wireless body sensor networks," Advances in Intelligent Systems and Computing, Volume 707, Pages 151-161. https://doi.org/10.1007/978-981-10-8639-7_16
- [4] Satpathy, Suchismita, Sahoo, Bibhudatta, **Ashok Kumar Turuk**, Maiti, Prasenjit, 2018, "Sensing-Actuation as a Service in Cloud Centric Internet of Things," Lecture Notes in Networks and Systems, Volume 19, Pages 57 - 66, 2018. https://doi.org/10.1007/978-981-10-5523-2_6

- [5] Sampa Sahoo; Bibhudatta Sahoo; and **Ashok Kumar Turuk, 2018**, "Video Transcoding Services in Cloud Computing Environment," *Studies in Big Data*, Volume 39, Pages 417 - 433, 2018. https://doi.org/10.1007/978-3-319-73676-1_16
- [6] Suchismita Rout, **Ashok Kumar Turuk**, and Bibhudatta Sahoo, **2017**, "Techniques to Enhance the Lifetime of MANET," In Niranjan Kumar Ray, and Ashok Kumar Turuk (Eds.), *Handbook of Research on Advanced Wireless Sensor Network Applications, Protocols, and Architectures* Pages 278-306, Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-5225-0486-3.ch011>
- [7] Prasenjit Maiti, Sourav Kanti Addya Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2017**, "Energy Efficient Wireless Body Area Network (WBAN)," *Renewable and Alternative Energy: Concepts, Methodologies, Tools, and Applications*, Pages 1093 - 1112, 19 Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-5225-1671-2.ch035>
- [8] Ram Prasad Mohanty, **Ashok Kumar Turuk** and Bibhudatta Sahoo, **2016**, "Designing of High Performance Multicore Processor with Improved Cache Configuration and Interconnect," In G. Deka, G. Siddesh, K. Srinivasa, and L. Patnaik (Eds.), *Emerging Research Surrounding Power Consumption and Performance Issues in Utility Computing*, Pages 204-219, Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-4666-8853-7.ch009>
- [9] Sampa Sahoo, Bibhudatta Sahoo, **Ashok Kumar Turuk**, and Sambit Kumar Mishra, **2016**, "Real Time Task Execution in Cloud Using MapReduce Framework," *Resource Management and Efficiency in Cloud Computing Environments*, Pages 190-209, Hershey, PA, IGI Global.
- [10] Sourav Kanti Addya, Bibhudatta Sahoo, and **Ashok Kumar Turuk, 2015**, "Virtual Machine Placement Strategy for Cloud Data Center," In *Web-Based Services: Concepts, Methodologies, Tools, and Applications*, Pages 783-808, <https://doi.org/10.4018/978-1-4666-9466-8.ch035>, Hershey, PA: IGI Global.
- [11] Niranjan Kumar Ray and **Ashok Kumar Turuk, 2012**, "Broadcasting in Wireless Ad hoc Networks: Approaches and Challenges", In K. Lakhtaria(Ed.), *Technological Advancements and Applications in Mobile Ad hoc Networks: Research Trends*, Pages 65-80, Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-4666-0321-9.ch004>
- [12] Niranjan Kumar Ray and **Ashok Kumar Turuk, 2012**, "Energy Conservation Issues and Challenges in MANETs," In K. Lakhtaria(Ed.), *Technological Advancements and Applications in Mobile Ad hoc Networks: Research Trends*, Pages 291-318, Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-4666-0321-9.ch017>