# Ranjit Kumar Behera, Ph.D.

**Designation** : Senior Assistant Professor

**Department :** Department of Computer Science and Engineering

(JOINED THE INSTITUTE IN 2022)

**Contact** : +91-9861762524 (M)

**Email** : ranjit.behera@silicon.ac.in

## RESEARCH INTERESTS
- ✓ Internet of Things in Smart City Applications
- ✓ Task Scheduling and Load balancing in Fog Computing
- ✓ Software Reliability
- ✓ Machine Learning

## Academic Qualifications

Ph. D. (CSE) Biju Patnaik University of Technology, Rourkela, India

M. Tech. (CSE), National Institute of Science & Technology, Berhampur, India

B.E. (CSE), National Institute of Science & Technology, Berhampur, India

## Teaching Experience/Industrial Experience/Research Experience
19+ years of Teaching experience

# PUBLICATIONS

## JOURNALS ARTICLES

[1]. Roy, Diptendu Sinha, **Ranjit Kumar Behera,** K. Hemant Kumar Reddy, and Rajkumar Buyya. "A context-aware fog enabled scheme for real-time cross-vertical IoT applications." *IEEE Internet of Things Journal* 6, no. 2 (2018): 2400-2412.

[2]. Reddy, K. Hemant Kumar, **Ranjit Kumar Behera**, Alok Chakrabarty, and Diptendu Sinha Roy. "A service delay minimization scheme for QoS-constrained, context-aware unified IoT applications." *IEEE Internet of Things Journal* 7, no. 10 (2020): 10527-10534.

[3]. **Behera, Ranjit Kumar**, K. Hemant Kumar Reddy, and Diptendu Sinha Roy. "Modeling and assessing reliability of service-oriented internet of things." *International Journal of Computers and Applications* 41, no. 3 (2019): 195-206.**Ranjit Kumar Behera**, Patro, A., Reddy, K. H. K., & Sinha Roy, D. (2021).

[4]. **Behera, Ranjit Kumar**, Amrut Patro, K. Hemant Kumar Reddy, and Diptendu Sinha Roy. "An efficient fog layer task scheduling algorithm for multi-tiered iot healthcare systems." *International Journal of Reliable and Quality E-Healthcare (IJRQEH)* 11, no. 4 (2022): 1-11.

[5]. Patro, Amrut, and **Behera Ranjit Kumar**. "A queuing based technique for efficient task scheduling in fog." In *Journal of Physics: Conference Series*, vol. 2007, no. 1, p. 012034. IOP Publishing, 2021.

## BOOK CHAPTERS:

[1]. **Behera, Ranjit Kumar**, and Biswajeet Padhi. "A smart document converter: Conversion of handwritten text document to computerized text document." *Machine Learning Algorithms for Industrial Applications* (2021): 153-166.

[2]. **Behera, Ranjit Kumar**, Mohit Misra, and Amrut Patro. "A Rf-Based Social Distance Smart Band System in Organization." In *Artificial Intelligence Techniques in Human Resource Management*, pp. 173-193. Apple Academic Press, 2023.

## CONFERENCE PAPERS:

[1]. Dwarikanath choudhury, **Ranjit Kumar Behera**, & Dayal Behera (2023) "Design and implementation of a cost-effective smart dustbin for segregating wet and dry waste", in international conference on Emerging Trends in Engineering and Technology-Industry 4.0 (ETETI-2023), CRC Press, Taylor & Francis Group.

[2]. **Ranjit Kumar Behera**, Patro, A., & Sinha Roy, D. (2021). A Resource Aware Load Balancing Strategy for Real-Time, Cross-Vertical IoT Applications. In 2nd International Conference on Biologically Inspired Techniques in Many-Criteria Decision Making (BITMDM-2021),Springer.

[3]. Mohit Misra, Amrut Patro, Diptendu Sinha Roy, **Ranjit Kumar Behera** "An Efficient Two Wheeler Anti-theft System based on Three-Layer Architecture", 4th International Conference in Comunication, Devices and Networking (ICCDN 2020),Springer.

[4]. **Ranjit Kumar Beher**a, K Hemant K Reddy, Diptendu S Roy, (2019), "A Novel Context Migration Model for Fog-enabled Cross-Vertical IoT Applications", In International Conference on Innovative Computing and Communication (ICICC- 2019), TU, Ostrava, Czech Republic (Europe),Springer.

[5]. **Ranjit Kumar Behera**, Nicky Kumar, Avinash Mahala, K Hemant Reddy, "A Novel Cost Minimization Approach for Data Transaction in the Context of IoT", In Smart Computing and Informatics 2018 (pp. 393-402).Springer.

[6]. **Ranjit Kumar Behera**, K. Hemant K. Reddy, and Diptendu S. Roy," Reliability Assessment of Energy Monitoring Service for a Futuristic Smart City", In the proceeding of Second International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2016) Udaipur, Rajasthan,India

[7]. **Ranjit Kumar Beher**a, K Hemant K Reddy, Diptendu S Roy, (2015), "Reliability modeling of service oriented internet of things" In the proceeding of 4th International Conference on Reliability, Infocom Technologies and Optimization (Trends and FutureDirections)"

[8]. **Ranjit Kumar Behera**, Shyam Gupta, Akash Gautam, "Big-Data Empowered Cloud Centric Internet of Things", In the proceeding of

International Conference on Man and Machine Interfacing-MAMI'15. IEEE

[9]. Gouda, Bhabani Sankar, Chandan Kumar Behera, and **Ranjit Kumar Behera**. "A scenario based simulation analysis and performance evaluation of energy efficiency enhancement of routing protocols in MANET." Automation, Computing, Communication, Control and Compressed sensing (iMac4s), 2013 International Multi- Conference on. IEEE,2013.

## ANY OTHER

### WORKSHOP/FDP ORGANIZED

[1]. Coordinated a one-week Faculty Development Programme on "**Embedded Systems & Interfacing Hands-on**" jointly organized by Electronics and ICT Academies held from June 10 – 14, 2019 at National Institute of Science & Technology through National Knowledge Network under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India. This programme is endorsed by AICTE / UGC /NBA

[2]. Coordinated a one-week Faculty Development Programme on "**Deep Learning and Applications**" jointly organized by Electronics and ICT Academies held from December 9-13, 2019 at National Institute of Science & Technology through National Knowledge Network under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India. This programme is endorsed by AICTE / UGC /NBA

### CONFERENCE ATTENDED

[1]. Attended 4th International Conference in (Digital) Communication, Devices and Networking (ICCDN 2020), from 19th to 20th December-2020, organized by the Department of Electronics & Communication Engineering, Sikkim Manipal Institute of Technology, India,Springer

[2]. Attended Second International Conference on (Digital) Research and Innovations in Science, Engineering & Technology" ICRISET-2020, from 4th - 5th September-2020, organized by Birla Vishvakarma Mahavidyala Engineering College, Vallabh Vidyanagar , Gujrat, India,IEEE

[3]. Attended an International Conference on Man and Machine Interfacing (MAMI"15) from 17th to 19thDecember 2015, organized by C.V Raman College of Engineering, Bhubaneswar, which was technically co-sponsored by IEEE Kolkatasection.

[4]. Attended the 4th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) organized in association with Computer Society of India held during September 2-4, 2015 at Amity University, Uttar Pradesh, which was technically Co-Sponsored by IEEE UPSection.

[5]. Attended a three days National Conference on "Cloud Computing" held during 19th- 21st January, 2015 organized by School of Computer Science,NIST,Berhampur.

[6]. Attended a National Conference on High Performance Computing &

Simulation organized by School of Computer Science & Engineering, National Institute of Science & Technology, Berhampur held during January18-192013.

[7]. Attended an IEEE International Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing organized by St.Joseph"s College of Engineering and Technology, Palai, Kottayam held during March 22-23, 2013, Co-Sponsored by IEEE KeralaSection.

[8]. Attended 10th International Conference on Information Technology (ICIT-2007) organized by National Institute of Technology, Rourkela with collaboration with OITS, held during December 17- 20,2007.

## WORKSHOP/FDP ATTENDED

[1]. Participated and obtained "**A**" grade in a **one-week Faculty Development Program on** "**AI and Machine Learning**" jointly organized by Electronics and ICT Academics through National Knowledge Network under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India **from 23 December – 27 December, 2019** at National Institute of Science and Technology, Berhampur.

[2]. Participated in a **one-week Faculty Development Program on** "**Robotics and AI**" at National Institute of Science and Technology, jointly organized by Electronics and ICT Academics held **from June 24 – 28, 2019** through National Knowledge Network under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government ofIndia.

[3]. Participated in a **short-term course on** "**Introduction to Programming: A Pedagogical Approach**" at National Institute of Science and Technology, jointly organized by Electronics and ICT Academy, Indian Institute of Technology, Kanpur from 17th June to 21st June,2019.

[4]. Participated in a **one-week Faculty Development Program on** "**Deep Learning and Applications**" and obtained „**A'** grade at National Institute of Science and Technology, jointly organized by Electronics and ICT Academics held from 27 May – 31 May, 2019 through National Knowledge Network under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government ofIndia.

[5]. Participated in a **one-week Faculty Development Program on** "**Network Security**" at National Institute of Science and Technology, jointly organized by Electronics and ICT Academics held from May 20-24, 2019 through National Knowledge Network under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India. This programme is endorsed by AICTE / UGC /NBA.

[6]. Attended a Workshop on "**Artificial Intelligence and Deep Learning**" held at National Institute of Science and Technology, Berhampur from September 1, 2018 to September 3, 2018 conducted by leadingindia.ai, a nationwide initiative by Bennette University, Greater Noida,India.

[7]. Participated in the Workshop on "**Disruptive Technology Management**"

held on 10<sup>th</sup> December, 2016 at National Institute of Science and Technology,Berhampur.

[8]. QIP/AICTE Sponsored Shot-Term Course on "**Internet of Things: Convergence of Sensing, Cloud and Big-Data Networking**" is organized by Indian Institute of Technology, Kharagpur from 13th -26th July2015.

[9]. Two week ISTE main workshop on **"Computer Programming"** is organized by Indian Institute of Technology, Bombay at remote center National Institute of Science and Technology from 16<sup>th</sup> June 2014 – 21<sup>st</sup> June2014.

## REVIEWER IN REFFERED JOURNAL/BOOK CHAPTER

[1]. Reviewed paper for "IoT Internet of Things Journal", Publisher is"IEEE".

[2]. Book chapter review for "Machine Learning Algorithms for Industrial Applications". Publisheris "Springer".

[3]. Reviewed papers for few conferences.

## ACHIEVEMENTS

[1]. Got the **University Foundation Day Research Award-2019** (TEQIP-III, BPUT, Odisha) in Ph.D Research ScholarCategory.

[2]. Got the **Academic Honorarium for Research paper publication** at National Institute of Science and Technology for the academic year-2018.

[3]. Qualified in GATE-2007 and 2008

[4]. Life Member ISTE, CSI and OITS