



## Samaleswari Prasad Nayak, Ph.D.

**Designation** : Senior Assistant Professor

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

(JOINED THE INSTITUTE IN 2011)

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### RESEARCH INTERESTS

- ✓ Wireless Sensor Network
- ✓ Internet of Things

### Academic Qualifications

- ✓ Ph.D. (Computer Science), Utkal University, India, 2020
- ✓ M.Tech. (Computer Science), Utkal University, India, 2011
- ✓ MCA, Silicon Institute of Technology, Bhubaneswar, Biju Pattanaik University of Technology, Odisha, India, 2009
- ✓ BSc(Physics Honors), Dhenkanal Autonomous College, Odisha, India, 2006

### Teaching Experience/ Industrial Experience/ Research Experience

- ✓ Assistant Professor, Dept. of Computer Science & Engineering, Silicon Institute of Technology, Bhubaneswar, India since August 2011 .
- ✓ Lecturer, Dept. of Master in Computer Application, Srusti Academy of Management, Bhubaneswar India from July 2010 to April 2011.
- ✓ I was a member of Core-banking project of Allahabad Bank for 3.5 months as trainee at Tata Consultancy Services, Kolkata in 2009.

**JOURNALS:**

- ✓ **Samaleswari Prasad Nayak**, Satyananda Champati Rai, S Pradhan, J.K. Mantri, "RELAS: A reliable authentication system for patient monitoring using IoT", International Journal of Knowledge-based and Intelligent Engineering Systems (**Scopus Indexed, SCIE**), vol. 24, issue. 2, pp. 83-93, 2020.
- ✓ Suchismita Rout, **Samaleswari Prasad Nayak**, "Energy Minimization Technique in SDN using Efficient Routing Policy", Journal of Xi'an University of Architecture & Technology (**Scopus Indexed**), vol. XII, Issue IV, pp. 3512-3519, 2020.
- ✓ **Samaleswari Prasad Nayak**, Surajit Das, Satyananda Champati Rai, Sateesh Kumar Pradhan, "SIMAS: smart IoT model for acute stroke avoidance", International Journal of Sensor Networks, Inderscience (**Scopus Indexed**), vol. 30, pp. 83-92, 2019.
- ✓ **Samaleswari Prasad Nayak**, Satyananda Champati Rai, Sateesh Kumar Pradhan, "An IoT Framework for Real-Time Event Detection and Acquisition Using Mobile Sink", International Journal of Engineering & Technology (**Scopus Indexed**), vol. 7, pp. 466-473, 2018.
- ✓ Monalisha Mishra, **Samaleswari Prasad Nayak**, Basant Kumar Nayak, "**Maximizing Network Lifetime With Adaptive Clustering In Wireless Sensor Networks**", International Journal of Advances in Electronics and Computer Science, 2016, Vol. 3, pp. 37 –41
- ✓ **Samaleswari Prasad Nayak**, Satyananda Champati Rai, "A Performance Analysis of Energy Efficient Routing Protocols in Wireless Sensor Networks", International Journal of Innovations & Advancement in Computer Science IJIACS, 2015, Vol.4, pp. 248 – 255

**CONFERENCE PROCEEDINGS:**

- ✓ **Samaleswari Prasad Nayak**, Stitapragyan Lenka, Satyananda Champati Rai, Sateesh Kumar Pradhan, "An optimal clustering algorithm for wireless sensor network", Proceedings of 2017 International Conference on Signal Processing and Communication (ICSPC), Indexed in IEEE Explorer and Scopus, pp. 462-466, July 28-29, 2017.

## BOOK CHAPTER

- ✓ **Samaleswari Prasad Nayak,** Satyananda Champati Rai, Sipali Pradhan, "A Multi-clustering Approach to Achieve Energy Efficiency Using Mobile Sink in WSN", Proceedings of 2016 Computational Intelligence in Data Mining, pp. 793 - 801, Part of the Advances in Intelligent Systems and Computing book series, Indexed in Springer (AISC, volume 556).
- ✓ **Samaleswari Prasad Nayak,** Satyananda Champati Rai, Sateesh Kumar Pradhan, "MERA: A Multi-clustered Energy Efficient Routing Algorithm in WSN", Proceedings of 2015 International Conference on Information Technology (ICIT), Indexed in IEEE Explorer, pp. 37 - 42, December 21 - 23, 2015.
- ✓ **Samaleswari Prasad Nayak,** Kasturi Dhal, Satyananda Champati Rai, Sateesh Kumar Pradhan, "TIME: Supporting topology independent mobility with energy efficient routing in WSNs", 2015 1st International Conference on Next Generation Computing Technologies (NGCT), Indexed in IEEE Explorer, pp. 350 - 355, September 4 - 5, 2015.
- ✓ SAW: A Real-Time Surveillance system at Agricultural Warehouse Using IoT – **Communication to Elsevier-2020.**
- ✓ Wearable sensors and machine intelligence for smart healthcare – **Communication to Springer – 2020**

**Technical Proficiency**

- ✓ Languages: C, C++, Java (Core), Python, SQL
- ✓ Frontend: HTML, CSS, Java Script
- ✓ Backend: Oracle
- ✓ Data Structure, Operating System (Windows, Linux), Internet of Things, Machine Learning, Data Science
- ✓ Microsoft Office, Matlab, Arduino, X-Fig, Latex

**Training/ Workshop Conducted**

- ✓ Conducted a National level webinar as convenor on "Machine Learning and its Applications" from 4-6 March 2021 at Silicon Institute of Technology, Bhubaneswar.
- ✓ Conducted hands-on summer training on "Enhance your skills in C Programming" for 750 students across India at Silicon Institute of Technology, Bhubaneswar, 2020.
- ✓ Conducted a hands-on training on "Object oriented concepts

of C++" at Silicon Institute of Technology, Bhubaneswar for 35 students, 2020.

- ✓ Conducted a hands-on training on "Internet of things (IoT)" at department of IMCA of Utkal University, Bhubaneswar for 60 students, 2018.
- ✓ Conducted a hands-on training on "Enhance your skills in object oriented concepts using C++ language" at Silicon Institute of Technology, Bhubaneswar for 91 students, 2017.
- ✓ Conducted technical programs as speaker at different DAV schools of Ranchi, Hazaribag and Odisha.
- ✓ Conducted hands-on technical programs at Silicon Institute of Technology, Bhubaneswar on behalf of Google Developer Group (GDG), Bhubaneswar.
- ✓ Presented articles in reputed International conferences sponsored by IEEE and Springer.
- ✓ Attended several International and National conferences, seminars, faculty development programs and workshops throughout India.
- ✓ Conducted several Faculty Development Programs to enhance the skills.

### **Projects/Research Undertaken**

- ✓ Designed a real-time cloud-based healthcare model using Internet of Things (IoT) to provide a reliable solution for patients and other human being during different activities through my PhD work.
- ✓ Completed a real-time vehicle management system (**SAYAS**) for school and college using RFID and GPS technologies to provide a solution for students, parents and college/school authorities.
- ✓ Worked as a member in "Development of a Traffic Surveillance System at Unguarded Road Crossing in Urban Areas" project funded by AICTE.
  - ✓ Working as a member in development of different IoT models with Phoenix Robotics Pvt. Ltd.