Resume

1. **Name in Full - Leena Samantaray**
2. **Date of Birth – 07/07/1975**
3. **Nationality – Indian**
4. **Category (General/Sc/ St) - General**
5. **Sex(Male/Female) –Female, Marital Status -- Married**
6. **Father's Name – Ramesh Ch. Samantaray**
7. **Address for Correspondence - JO-QR.NO-07, SCB Medical Campus, Ranihat ,Cuttack,Mobile No- 9861181558,E-mail id-leena_sam@rediffmail.com**
8. **Permanent Address - Jo.qr.No-07,SCB Medical college campus Ranihat,Cuttack,OdishaPin-753007,Email:Leena_sam@rediffmail.com,Mobile:9861181558.**
9. **Present Position/Designation - Professor & Principal**
10. **Academic Qualifications - Engg.(OEC), ME (VSSUT), Ph.D. in Engineering (Sambalpur University in April 2010)**
11. **Name &Address Of inst. - ABIT, cda, sector-1, CUTTACK**
12. **Work Description -Teaching, Research &Administration**
13. **Guiding PhD candidates for research -04**
14. **Faculty Development Programmes, Conference (Conducted)**
    1. **Programme -National Seminar on Recent advances in Control System Instrumentation Duration- 27th& 28thSeptember 2013, Sponsored by - AICTE**
    2. **Programme -National Symposium On Industrial Control & Electronics Engg. Duration-14th March 2015, Sponsored by - AICTE**
    3. **Programme -National Seminar on** Wireless communication **&Mobile computing Duration- 8**th**& 9**th**2015, Sponsored by – AICTE**

15. Research projects undertaken

S. No	Name of the Project	Sponsoring Agency	Amount sanctioned
1	SDP on Recent advances, Issues & challenges in IOT & AI	TEQIP, BPUT,ODISHA	3.305 Lakhs
2	FDP on Implementation of Machine Learning, Artificial Intelligence in Data Processing using MATALB.	TEQIP, BPUT,ODISHA	3.805 Lakhs
3	National Seminar on Recent advances in Control System Instrumentation	AICTE	2 Lakh
4	National Symposium On Industrial Control & Electronics Engineering	AICTE	1 Lakh
5	MODROB Scheme For VLSI Laboratory	AICTE	Five Lakhs Twenty Eight Thousand only

16. **Honors –**

1. **Chief guest& chief speaker -Attended as Chief Guest And presented a talk on on ICT day in IE local chapter Angul**
2. **Guest of honor- In "Sovaniya Andolan" a mission of decency and discipline movement.**
3. **Member of Joint board of studies**
4. **Member of Academic council from 2016.**
5. **Chairperson of 07 Nos. of DSC .**
6. **Member of the Board of Management, BPUT(University), Rourkela, Odisha**

17 **Responsible positions/administration Activities**

1. **Name of the activities- Principal (I /C), Date of activities held -26th Dec2016 till Date**
2. **Name of the activities- Principal(I /C),Date of activities held -26th to 29th Dec2013**
3. **Name of the activities – HOD AEI,Date of activities held -From 25th Sept 2006**
4. **Name of the activities – HOD, ENT,Date of activities held -From 2012**
5. **Name of the activities – Question paper setter of Sambalpur UN, Date of activities held – 21st Jan 2012**

18. **Membership of Professional Bodies –**

(i) Life Member in ISTE -- Membership No. LM 08939

(ii) Life Member in Women science congress - Membership No. -L19104

(iii) Member of CSI- Membership No. F8003295

19. **Googlescholar ID : https://scholar.google.co.in/citations?user=LztwtDIAAAAJ&hl=en**

20. **ORCID ID : https://orcid.org/0009-0005-8201-096X**

21. **Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=14016613000**

22. **Research Guidance:**

(i PhD Thesis – (Two – 4 (Four)

Sl.	Name of the student	Title of the Thesis	University	Year
1	SONAM PANDEN BARFUNGPA	SKIM UNIVERSITY	Awarded.	2025
2	Dipti Prava Sahu	Research Scholar, BPUT,RKL	Awarded.	2025
3	ANNAPURNA SAHOO	AJAY BINAY INSTITUTE OF TECHNOLOGY,CTC	Enrolled	2023-24
4	E.MADHUSMITA PATRA	KALAM INSTITUTE OF TECHNOLOGY, BERHAMPUR	Enrolled continuing	2023-24

3. JOURNAL PUBLICATIONS

L. Samantaray, T.T. Tripathy, R. Panda, "A novel 3D differential entropy-based multi-class segmentation technique for brain MR image analysis," **Biomedical Signal Processing and Control, Elsevier**, vol. 100, p.107064**,** Dec. 2024. **(SCIE, I.F.=5.07)/ (SCOPUS)**

S.P. Barfungpa, **L. Samantaray**, H.K. Deva Sarma, "SMOTE-based adaptive coati kepler optimized hybrid deep network for predicting the survival of heart failure patients," **Multimedia Tools and Applications**, **Springer**, vol. 83(24), pp. 65497–65524, June 2024. **(SCIE, I.F.=3.00)/ (SCOPUS)**

D.P. Sahu, B. Tripathy, **L. Samantaray,** "FogNet: Custom CNN with optimal feature selection-based combat model for secured fog computing environment", e-Prime—Advances in Electrical Engineering, Electronics and Energy, vol. 8, p.100604, June 2024. **(SCOPUS)**

D.P. Sahu, B. Tripathy, **L. Samantaray,** "Optimized Intrusion Detection System in Fog Computing Environment Using Automatic Termination-based Whale Optimization with ELM, International Journal of Computer Network and Information Security, vol. 16(2), pp. 79–91, April 2024. **(SCOPUS)**

S.P. Barfungpa, **L. Samantaray**, H.K. Deva Sarma, R. Panda, A. Abraham, "D-t-SNE: Predicting heart disease based on hyper parameter tuned MLP," **Biomedical Signal Processing and Control, Elsevier**, pp.1-12, June 2023. **(SCIE, I.F.=5.07)/ (SCOPUS)**

L. Samantaray, R. Panda, M.K. Naik, A. Abraham, "A novel adaptive class weight adjustment-based multiclass segmentation error minimization technique for COVID-19 X-ray image analysis," **International Journal of Imaging Systems and Technology, Wiley**, pp.1-16, May 2023. **(SCIE, I.F.=2.17)/ (SCOPUS)**

S.P. Barfungpa, H.K. Deva Sarma, **L. Samantaray**, "An intelligent heart disease prediction system using hybrid deep dense Aquila network," **Biomedical Signal Processing and Control, Elsevier**, vol. 84, p. 104742, July 2023. **(SCIE, I.F.=5.07)/(SCOPUS)**

G. Das, R. Panda, **L. Samantaray**, S. Agrawal, "A novel non-entropic objective function for multilevel

optimal threshold selection using adaptive equilibrium optimizer," **Iranian Journal of Electrical and Electronics Engineering**, pp.1-16, January 2022. **(Scopus)**

R. Panda, **L. Samantaray**, A. Das, S. Agrawal, A. Abraham, "A novel evolutionary row class entropy based optimal multi-level thresholding technique for brain MR images," **Expert Systems with Applications, Elsevier,** vol.168, p.114426, April 2021. **(SCIE, I.F.=8.66)/ (SCOPUS)**

M.K. Naik, R. Panda, **L. Samantaray**, A. Abraham, "A novel threshold score based multiclass segmentation technique for brain MR images," **Imaging Systems and Technology, Wiley**, pp. 1-17, Dec. 2021. **(SCIE, I.F.=2.17) / (SCOPUS)**

G. Das, R. Panda, **L. Samantaray**, S. Agrawal, "A novel segmentation error minimization based method for multilevel optimal threshold selection using opposition equilibrium optimizer," **International Journal of Image and Graphics**, **World Scientific**, pp.1-14, December 2021. **(ESCI, I.F.=1.17) / (SCOPUS)**

L. Samantaray, S. Hembram, R. Panda, "A New Harris Hawks-Cuckoo Search Optimizer for Multilevel Thresholding of Thermogram Images" Revue d'inteliigence Artificiele, **IIETA**, communicated, Oct. 2020. **(Scopus)**

A. Das, S. Agrawal, **L. Samantaray**, R. Panda, A. Abraham, "A Review on State-of-the Art Optimal Multilevel Thresholding Methods for Brain MR Image Analysis." Revue d'inteliigence Artificiele, **IIETA**, Vol.34(3), pp. 243-256, June 2020. **(Scopus)**

L. Samantaray, and R. Panda, "Design of maximally flat filters for signal processing applications," **WSEAS Transaction on Signal Processing,** Vol. 15, pp. 55-64**,** Aug. 2019. **(Scopus)**

S. Agrawal, **L. Samantaray,** R. Panda, and L. Dora, "A new hybrid ACS-SS algorithm for brain MR image analysis," Book Title: *Hybrid Machine Intelligence for Medical Image Analysis,* **Springer,** Chapter-5, June 2019. *ISBN: 978-981-13-8929-0.*

S. Agrawal, R. Panda, **L. Samantaray**, and A. Abraham, "A novel automated absolute intensity difference based technique for optimal MR brain image thresholding, **Computer and Information Sciences, Elsevier**, pp.1-15, Jan. 2018. **(SCIE, I.F.=6.90)**

R. Panda, S., Agrawal, **L. Samantaray** and Ajit Abraham, "An evolutionary gray gradient algorithm for multilevel thresholding of brain MR images using soft computing techniques", **Applied Soft Computing, Elsevier,** vol. 50, pp. 94-108, Nov. 2016. **(SCIE, I.F.=8.26)**

S. Agrawal, R. Panda and **L. Samantaray**, "A novel hybrid CS-BFO algorithm for optimal multilevel image thresholding using edge magnitude information," Book Title: Hybrid soft computing techniques for multilevel image thresholding, **Springer,** pp. 53-85, Jan. 2017.

M.K. Naik, **L. Samantaray** and R. Panda, "A Hybrid CS-GSA Algorithm for Optimization," Book Title: Hybrid Soft Computing Approaches: Research and Applications, **Springer,** pp. 3-35, Oct. 2015.

L. Samantaray and R. Panda, "Signal Decimation and Interpolation in Fractional Domain using Non-linear Basis Functions", International Journal of Signal Processing, Image Processing and Pattern Recognition, **SERSC Korea**, Vol.6, No.4, pp.415-430, Aug. 2013.

R.Panda, **L. Samantaray** and D.K.Rout, "A Mobile Network Based Architecture for Body Area Networks," **International Journal of Computer Information Systems**, vol.3, No.6, pp.23-26,

December 2011.

R. Panda, **L. Samantaray** and D.K. Rout, "A Novel Modulation Technique for High Data Rate Body Area Networks," **IETE Journal of Research**, vol.58, Issue 5, pp.418-424, October 2012. **(SCIE, I.F.=1.87) / (SCOPUS)**

L. Samantaray, M. Dash and R. Panda, "A Review on Time-frequency, Time-scale and Scale-frequency domain signal analysis", **IETE Journal of Research**, vol. 51, No. 4, pp. 287-293, July 2005. **(SCIE, I.F.=1.87) / (SCOPUS)**

R. Panda, M. Dash and **L. Samantaray**, "Fast Eulerian Filters for Image Interpolation and Representation", **Journal of the CSI** , vol. 34, No. 3, pp. 50-57, July 2004.

M. Dash, **L. Samantaray** and R. Panda, "Band limited signal interpolation using Eulerian filters", **Journal of IE (India),** Electronics and communication Engg. Division, vol. 84, pp. 22-24, July 2003.

20. BOOK CHAPTERS

S. Agrawal, **L. samantaray,** R. Panda, and L. Dora, "A new hybrid ACS-SS algorithm for brain MR image analysis," Book Title: *Hybrid Machine Intelligence for Medical Image Analysis,* **Springer,** Chapter 5, June 2019, *ISBN: 978-981-13-8929-0.*

S. Agrawal, **R. Panda** and L. Samantaray, "A novel hybrid CS-BFO algorithm for optimal multilevel image thresholding using edge magnitude information," Book Title: Hybrid soft computing techniques for multilevel image thresholding, **Springer**, Chapter-3, pp. 53-85, Jan. 2017. *ISBN: 978-3-319-47222-5.*

2. M.K. Naik, L. Samantaray and R. **Panda**, "A Hybrid CS-GSA Algorithm for Optimization," Book Title: Hybrid Soft Computing Approaches: Research and Applications, Dr. Bhattacharya et al (Eds.), **Springer**, Chapter-1, pp.1-33, Aug. 2015. ISBN: ISBN 978-81-322-2544-7.

21.CONFERENCE PUBLICATIONS

[1] Annapurna Sahoo, Leena Samantaray (2020), Dept. of Electronics and Telecommunication Engg., BPUT Ajay Binay Institute of Technology, "Nonlinear Photonic Based Network Devices to Meet Big Data Challenges: A Review" IEEE, March 14-2020

[2] Annapurna Sahoo, Leena Samantaray (2024), Dept. of Electronics and Telecommunication Engg., BPUT Ajay Binay Institute of Technology, "Ultrasonic Communication using ASK Modulation and Demodulation Technique for Implanted Sensor in Wireless Body Area Network" Taylor and Francis conference, March 2024, ICCTCCI, Cuttack.

[3] Annapurna Sahoo, Leena Samantaray (2024), Dept. of Electronics and Telecommunication Engg., BPUT Ajay Binay Institute of Technology, synopsis symposium "Implanted Communication Technology in Wireless Body Area Networks (WBAN)" March 2024, ICCTCCI, Cuttack.

4] Barfungpa, S. P., Samantaray, L., & Sarma, H. K. D. (2023). SMOTE-ENN Based Deep Stacking Network Model for Heart Disease Prediction. *International Conference on Computer Science and Engineering (I2CSE-23)*,*12*(04), 21095-21108

[1] R. Panda and L. Samantaray, "Adaptive signal approximation using bacterial foraging strategy", National Seminar on Soft computing Methods, Bhubaneswar, pp. 7-10 , April 2007.

[2] L. Samantaray, M. Dash and R. Panda, “A Magnetic Measurement System for Jaw Movements using Adaptive Spline Neural Networks”, Proc of the International Conference on Instrumentation, Pune, Dec 2004

[3] L. Samantaray, M. Dash and R. Panda, “Image compression using Eulerian filters ”, Proc of the Seminar on Communication, Signal Processing and Information technology, CSPIT-2002, Burla, pp. 40-43, 11 Feb. 2002.

[4] R. Panda, V. Sharma, M. Dash and L. Samantaray. “Texture classification using Laplacian pyramid. “ Proc of the Fourth International Conference on Information Technology, CIT-2002, 110-113, Dec. 2001.

[5] L . Samantaray , M. Dash and R. Panda. “ Image Compression Using Eulerian Filters “ Proc of CSPIT-2002 ,11 Feb ,2002, pp : 40-43,11 Feb.2002.

[6] M.Dash ,L. Samantary , “Neural Techniques for Energy Mangement in building”, Proc of National Seminar on Energy Management System and Auditing NESEMA ,SIET ,Dhenkanal feb. 2004 , Pages -23-25.

[7] R. Panda, and L. Samantaray, “Fast recursive algorithms for efficient multi-scale edge detection”, *Proc of the Indian Conference on Computer Vision Graphics and Image Processing*, Dec. 21-23, Bangalore (India), pp. 202-206, Dec. 2000.

[8] M.Dash ,L. Samantary, “Wireless local loop on Mobile Data Communication bsecurity problems “ADVICE,19th-20th March 2008, NITTTR, Chandigarh, Page:54.

[9] M.Dash ,L. Samantary , “ Power Estimation & Power Control In Cellular Communication “ Proc of National Conference on VLSI & Communication System , 20th -21th Feb 2009 , Pages-88-92.

[10] M.Dash ,L. Samantary ,” Fusion Technology Of NN & FS ; Our Lives “ , Proc of National Seminar on Soft Computing Application in Engineering. ,TAT, 8th-9thJan. , 2010 ,Pages-83-88.

[11] M.Dash ,L. Samantary , “ Face Recognition using Eigenvalues “, Proc of National Seminar on Image Processing & Recent Advances , ABIT , 12th-13th Jan . 2010 Pages -43-48.

[12] M.Dash ,L. Samantary , “A review of Check pointing Protocols For Mobile Computing System”, Proc of National Seminar on Wireless Communication & Mobile Computing”, ABIT , 8th-9th Oct . 2010 , Pages -18-20.

[13] L.Samantary , M.Dash, “ Time Synchonization Issues Within Wireless Sensor Networks. “, Proc of National Seminar on Advances in Instrumentation Mesurment & Automation”, (AIMA), 23rd&24th . 2011 , Pages -179-182.

[14] L. Samantaray, M.Dash and R.N.Panda,"Architecture for distributed control system and sensor network applications", 2nd National Conference on Recent Advances in Control and instrumentation (RACICON-2011), GIET, Gunupur, pp. 174-178, 2011.

[15]L.Samantaray,M.Dashand R.N.Panda,"PrewarpingTechniques:Applications in Nano Technology ", 4th National Conference on Recent Advances in Science & Technology ,ABIT, Cuttack, pp. 40-45, 2008.

[16] L. Samantaray, Suraj Panda,"Wirless Sensors for Idustrial and Health Care Application ", National Seminar on Recent Advances in Control System Instrumentation ABIT, Cuttack, pp. 9-15, 2013.

[17] Sagarika Sahoo ,L. Samantaray, Rutuparna Panda,"Design of Short -Circuited Stubs Based Bandpass Filter For Ultra-Wideband Application ", National seminar on Industrial Control &Electronics Engineering Instr ABIT, Cuttack, pp. 1-5, 2015.

[18] Amit Shankar Panda,L. Samantaray, Rutuparna Panda,"Two Stage CMOS Low NoiseAmlifier For Ultra Wideband Receiver ", National Seminar on Industrial Control &Electronics Enggineering Instr ABIT,Cuttack, pp.6-9, 2015.

[19] L. Samantaray, Madhumita Dash,"A Review on Body area network For Health Care Applications ", National conferance on Industrial Control &Electronics Enggineering Instr ABIT, Cuttack, pp. 10-12, 2015.

[20] L. Samantaray, Madhumita Dash,"Technical education &Training for sustainable National Development: Challenges & Issues ", Proc of 14th State Level Convention Of ISTE Odisha Section National conference , Cuttack, pp. 11-14, 2012.

[21] L. Samantaray, R. Panda, B.N Chatergee, “Fast recursive algorithms for efficient multi-scale edge detection" Proc of the ICVGIP , pp. 110-113, 21-23 Dec 2000.

20. Declaration:

I declare that the foregoing information is correct to the best of my knowledge and belief and nothing has been concealed/distorted. If any time, I am found to have concealed/distorted any material information, my appointment shall be liable to termination without notice.

I will, if and when required, take up duty in the discharge of government assignment anywhere in India.

Leena Samantaray