

Bio-Data

BIGHNARAJ NAIK, Ph.D., MIEEE

ASSISTANT PROFESSOR

DEPT. OF COMPUTER APPLICATION

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY (FORMERLY
UNIVERSITY COLLEGE OF ENGINEERING (UCE), BURLA), BURLA,
SAMBALPUR, ODISHA, INDIA, PIN:768018

Scopus Author Id: 56493274100

Link:

<https://www.scopus.com/authid/detail.uri?authorId=56493274100>

ResearcherID: A-1212-2016

Link: <http://www.researcherid.com/rid/A-1212-2016>

ORCID: <http://orcid.org/0000-0002-9761-8389>

Google Scholar Profile:

<https://scholar.google.co.in/citations?user=prT5L5UAAAAJ>

Present Postal Address:

**DR. BIGHNARAJ NAIK, DEPARTMENT OF COMPUTER APPLICATION, VEER
SURENDRA SAI UNIVERSITY OF TECHNOLOGY (FORMERLY UNIVERSITY
COLLEGE OF ENGINEERING (UCE), BURLA), BURLA, SAMBALPUR, ODISHA,
INDIA, PIN:768018**

E-mail Id: mailto:bnaik@gmail.com , bnaik_mca@vssut.ac.in

Mobile: **7978401366, 9439152272**

Permanent Address:

**DR. BIGHNARAJ NAIK, S/O- AHALYA NAIK, SAHARA PARA, DAILLY MARKET,
AT/PO – LOISINGHA, DIST – BALANGIR, ODISHA, INDIA, PIN - 767020**

Present Employment:

**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY (FORMERLY UNIVERSITY
COLLEGE OF ENGINEERING (UCE), BURLA), GOVT. OF ODISHA, BURLA,
SAMBALPUR, ODISHA, INDIA, PIN: 768018**

1. Education qualifications (Starting with the highest degree)

Degree/ Certificate Awarded	University/ Board	Year of Completion	Percenta ge of Marks/ CGPA	Specialization/ Subjects
Doctoral (Ph. D.)	Veer Surendra Sai University of Technology (Formerly UCE, Burla), Burla, Odisha	2016	9.00	Computer Science and Engineering (Specialization - Data Mining)
Masters (M. Tech)	F. M. University, Balasore, Odisha	2009	8.46	Computer Science and Engineering
Graduate (B.E)	National Institute of Science and Technology, BPUT, Odisha	2006	70%	Information Technology

2. Employment Record (Most recent first):

Sl. No.	Name of Employer	Designation of Post	Duties Performed	Period		Pay Scale
				From	To	
1	Veer Surendra Sai University of Technology (Formerly UCE, Burla), Burla, Govt. of Odisha	Assistant Professor	Teaching & Research	18/12/2012 To Till Date		15600-7000 – 39,100
2	Siksha 'O' Anusandhan University, Deemed to be University, Bhubaneswar, Odisha	Assistant Professor	Teaching & Research	14/09/2010 To 15/12/2012		15,600-6000- 39,100
3	RIT, Biju Patnaik University of Technology, Odisha	Lecturer	Teaching	02/01/2009 to 31/08/2010		8000-275- 13500

3. Projects/ Consultancy etc.

a. Sponsored Projects Undertaken:

Sl. No.	Title of Project	Sponsoring Agency	Grant Amount	Period		Your Role
				From	To	
1	Mining Socio-economic Factors Affecting Agricultural Productivity in Sambalpur District, Odisha State: Soft Computing based Machine Learning Approaches	SERB, Department of Science and Technology (DST), Govt. of India, New Delhi, India	Rs.19,6000/- (Rs. 19.06 Lakhs)	Start date: 27 th March 2018 Status: On-going		Principal Investigator

4. Research Guidance:

a. Ph.D. Thesis guided/ continuing:

Sl. No.	Title of Thesis	Name of the Student	Year of Joining	Year of Completion
1	Broad area of research - Soft Computing based Approaches for Data Mining	Mr. Himansu Das	Jan, 2017	Continuing
2	Broad area of research – Intelligent System Designing for Data Mining Task using Soft Computing	Ms. Debasmita Mishra	Aug, 2017	Continuing

5. Papers published in International Journals (SCI, ESCI and Scopus Only):

Sl. No.	Title of Paper	Names of the authors in order are they appear in papers	Name of the journal	Vol. & Year
1	Elitist Teaching Learning Based Optimization (ETLBO) with Higher order Jordan Pi-sigma neural network: A Comparative Performance Analysis	Janmenjoy Nayak, B., Naik, H. S., Behera, A., Abraham	<i>Neural Computing and Applications</i> , SPRINGER , [Impact Factor : 4.213 , SCIE, SCOPUS]	Vol. 30, Issue. 5, pp. 1445-1468, (2018)
2	A Novel Honey-Bees Mating Optimization Approach with Higher order Neural Network for Classification	Janmenjoy Nayak, B., Naik	<i>Journal of Classification</i> , SPRINGER [Impact Factor : 3.083 , SCIE, SCOPUS]	Vol. 35, pp. 511-548, (2018)
3	Neural Network and Fuzzy System for the tuning of Gravitational Search Algorithm parameters	Danilo Pelusi, Raffaele Mascella, Luca Tallini, Janmenjoy Nayak, Bighnaraj Naik, Ajith Abraham	Expert Systems With Applications , ELSEVIER [Impact Factor : 3.928 , SCI, SCIE, SCOPUS]	Vol. 102, pp. 234-244, (2018)
4	A TLBO based gradient descent learning-functional link higher order ANN: An efficient model for learning from non-linear data	Bighnaraj Naik, Janmenjoy Nayak and H.S. Behera	<i>Journal of King Saud University - Computer and Information Sciences</i> , ELSEVIER [SCOPUS]	Vol. 30, Issue 1, January 2018, pp. 120-139
5	Hybrid Chemical Reaction based Metaheuristic with Fuzzy c-means Algorithm for	Janmenjoy Nayak, B., Naik, H. S., Behera, A., Abraham	<i>Expert Systems With Applications</i> , ELSEVIER [Impact Factor :	Vol. 79 , pp. 282-295, (2017)

	Optimal Cluster Analysis		3.928, SCI, SCIE, SCOPUS]	
6	A Hybrid Elicit Teaching Learning based Optimization with Fuzzy c-means (ETLBO-FCM) Algorithm for Data Clustering	Janmenjoy Nayak, Bighnaraj Naik, D. P., Kanungo, H. S. Behera	<i>Ain Shams Engineering Journal</i> , ELSEVIER [ESCI, SCOPUS]	Vol. 9, No. 3, pp. 379-393, (2016)
7	A self adaptive harmony search based functional link higher order ANN for non-linear data classification	Bighnaraj Naik, Janmenjoy Nayak and H.S. Behera	<i>Neurocomputing</i> , ELSEVIER [Impact Factor: 3.241, SCI, SCIE, SCOPUS]	Vol. 179, 29 February 2016, pp. 69-87
8	An efficient FLANN Model with CRO based Gradient Descent Learning for Classification	Bighnaraj Naik, Janmenjoy Nayak, H. S. Behera	<i>International Journal of Business Information Systems</i> , INDERSCIENCE [SCOPUS]	Vol.21, No.1, pp.73 – 116
9	A novel nature inspired firefly algorithm with higher order neural network: Performance analysis	Janmenjoy Nayak, Bighnaraj Naik, H. S. Behera	<i>Engineering Science and Technology, an International Journal</i> , ELSEVIER [ESCI, SCOPUS]	Vol. 19, No. 1, March 2016, pp. 197-211
10	A Global-best Harmony Search based Gradient Descent Learning FLANN (GbHS-GDL-FLANN) for Data Classification	Bighnaraj Naik, Janmenjoy Nayak, H.S. Behera	<i>Egyptian Informatics Journal</i> , ELSEVIER [ESCI, SCOPUS]	Vol. 17, Issue 1, March 2016, pp. 57-87.
11	A novel Chemical Reaction Optimization based Higher Order Neural	Janmenjoy Nayak, Bighnaraj Naik,	<i>Ain Shams Engineering Journal</i> ,	Vol. 6, Issue 3, September 2015, pp. 1069-

	Network (CRO-HONN) for nonlinear classification	H. S. Behera	ELSEVIER [ESCI, SCOPUS]	1091
12	A Comprehensive Survey on Support Vector Machine in Data Mining Tasks: Applications & Challenges	Janmenjoy Nayak, Bighnaraj Naik, H. S. Behera	<i>International Journal of Database Theory and Application</i> , SERS C Publishing , Republic of Korea [SCOPUS]	Vol. 8(1): 169-186,(2015)
13	A survey on virtual sensor networks framework	Himansu Das, Bighnaraj Naik, Bibudendu Pati, and Chhabi Rani Panigrahi.	International Journal of Grid Distribution Computing [SCIE, SCOPUS]	7, no. 5 (2014): 121-130.

6. Papers published in International Conference:

Sl. No.	Title of Paper	Names of the authors in order are they appear in papers	Name of the Conference	Place & Date
1	Chemical Reaction Optimization: A Survey with Application & Challenges	Janmenjoy Nayak, Sura Paparao, Bighnaraj Naik, N. Seetayya, H. S. Behera, Danilo Pelusi	1 st International Conference on Soft Computing in Data Analytics, Published by : Springer International Publishing. [SCOPUS]	Sri Sivani College of Engineering, Place: Srikakulam, March 10-11, 2018
2	Detecting Intrusive Behaviors using Swarm-based Fuzzy Clustering Approach	Mishra, Debasmita, and Bighnaraj Naik	1 st International Conference on Soft Computing in Data Analytics, Published by : Springer International Publishing. [SCOPUS]	Sri Sivani College of Engineering, Place: Srikakulam, March 10-11, 2018

3	Perturbation Based Efficient Crow Search Optimized FLANN for System Identification: A Novel Approach	Bighnaraj Naik, Debasmita Mishra, Janmenjoy Nayak, Danilo Pelusi, Ajith Abraham	17 th International Conference on Hybrid Intelligent Systems (HIS 2017), Published by : Springer International Publishing. [SCOPUS]	South Asian University, Place: Delhi, India, Date : December 14-16, 2017
4	Crow Search Optimization Based Hybrid Metaheuristic for Classification: A Novel Approach	Bighnaraj Naik, Janmenjoy Nayak	1 st International Conference on Computing, Analytics and Networking (ICCAN-2017) Published by : Springer International Publishing. [SCOPUS]	KIIT University, Place: Bhubaneswar, Date : 15-16 December 2017
5	A Survey on Teaching Learning based Optimization Algorithm: Short Journey from 2011 to 2017	Janmenjoy Nayak, Bighnaraj Naik, G. T. Chandrasekhar, H. S. Behera	4 th International Conference on Computational Intelligence in Data Mining (ICCIDM-2017) Published by : Springer International Publishing. [SCOPUS]	VSSUT, Place: Burla, Odisha Date : 11-12 November 2017
6	Cluster Analysis using Firefly based K-Means Algorithm: A combined approach	Janmenjoy Nayak, Bighnaraj Naik & H. S. Behera	3 rd International Conference on Computational Intelligence in Data Mining Published by : Springer International Publishing. [SCOPUS]	KIIT University, Place: Bhubaneswar, Date : 10-11 December 2016

7	Fuzzy Clustering with Improved Swarm Optimization and Genetic Algorithm: Hybrid Approach	Bighnaraj Naik, Sarita Mahapatra, Janmenjoy Nayak & H. S. Behera	3rd International Conference on Computational Intelligence in Data Mining Published by : Springer International Publishing. [SCOPUS]	KIIT University, Place: Bhubaneswar, Date : 10-11 December 2016
8	Optimizing a Higher Order Neural Network Through Teaching Learning Based Optimization Algorithm	Janmenjoy Nayak, Bighnaraj Naik & H. S. Behera	2nd International Conference on Computational Intelligence in Data Mining Published by : Springer International Publishing. [SCOPUS]	R.I.T, Berhampur, Place: Bhubaneswar, 5-6 December 2015
9	A FLANN Based Non-linear System Identification for Classification and Parameter Optimization Using Tournament Selective Harmony Search	Bighnaraj Naik, Janmenjoy Nayak & H. S. Behera	2nd International Conference on Computational Intelligence in Data Mining Published by : Springer International Publishing. [SCOPUS]	R.I.T, Berhampur, Place: Bhubaneswar, 5-6 December 2015
10	Evolutionary Improved Swarm-Based Hybrid K-Means Algorithm for Cluster Analysis	Janmenjoy Nayak, D. P., Kanungo, B., Naik, H. S., Behera	Second International Conference on Computer and Communication Technologies (IC3T-2015) Springer	CMR Technical Campus, Hyderabad, Date : 24-26 July 2015

			International Publishing. [SCOPUS]	
11	Fuzzy C-Means (FCM) Clustering Algorithm: A Decade Review from 2000 to 2014	Janmenjoy Nayak, Bighnaraj Naik, H. S. Behera	1st International Conference on Computational Intelligence in Data Mining Springer International Publishing. [SCOPUS]	VSSUT, Burla, Odisha Date : 20-21 December 2014
12	Particle Swarm Optimization Based Higher Order Neural Network for Classification	Janmenjoy Nayak, B., Naik, H. S., Behera, A., Abraham	1st International Conference on Computational Intelligence in Data Mining Springer International Publishing. [SCOPUS]	VSSUT, Burla, Odisha Date : 20-21 December 2014
13	An Improved Swarm Based Hybrid K-Means Clustering for Optimal Cluster Centers	Janmenjoy Nayak, B., Naik, D. P., Kanungo, H. S., Behera	2nd International Conference on Information Systems Design and Intelligent Applications Springer International Publishing. [SCOPUS]	Kalyani University, West Bengal Date : 8-9 January, 2015

14	A higher order evolutionary Jordan Pi-Sigma Neural Network with gradient descent learning for classification	Janmenjoy Nayak, D. P., Kanungo, B., Naik, H. S., Behera	International Conference on High Performance Computing and Applications (ICHPCA – 2014) IEEE [SCOPUS]	C.V. Raman College of Engineering, Bhubaneswar Date: 22-24 December 2014
15	A hybrid PSO-GA based Pi sigma neural network (PSNN) with standard back propagation gradient descent learning for classification	Janmenjoy Nayak, B., Naik, H. S., Behera	IEEE International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT-2014) IEEE [SCOPUS]	Noorul Islam University, Tamilnadu Date : 10-11 July 2014

7. Administrative Responsibilities Held:

Sl. No.	Position/ Designation	Organization	Period		Responsibilities	Contribution
			From	To		
1	Departmental Academic Committee (DAC) member, Dept. of Computer Application	VSSUT, Burla	Nov 2017	Till Date	Setting up PEO and PO for the department. Academic plans preparation. Preparing of plan to meet PEO and PO.	Actively Participated.
2	Conducting Board Member, Dept. of Computer Application	VSSUT, Burla	Jan 2017	Till Date	Analyzing student results and addressing failure cases.	Actively Participated.
3	Doctoral Research Committee (DRC) member	VSSUT, Burla, from	Aug 2017	Till date	Smooth running of Ph. D. Programme	Actively Participated.
4	NBA Nodal Officer (Coordinator)	VSSUT, Burla	Oct 2016	Till date	Preparing and Handling All the NBA Files for the department.	Actively Participated.
5	Screening team member (Expert)	NIELIT, Govt. of India	Dec-2015	Jan-2016	Visiting centres under NIELIT and examining its status. Submitting a	Actively Participated.

					report to NIELIT.	
6	Faculty Advisor of University Cultural Function	VSSUT, Burla	Oct 2014	Nov 2016	Support for smooth organization of the events in University cultural function.	Actively Participated.
7	Laboratory In-Charge in Computer Application dept.	VSSUT, Burla	Jan 2017	Till date	Maintaining of equipments and infrastructures of the laboratory.	Actively Participated.
8	Organized International Conference as Convenor	VSSUT, Burla	11 th Nov 2017	12 th Nov 2017	All the task starting from conference approval to closing of event with audit report	Organized as Convenor
9	Organizing International Conference as Organizing Chair	VSSUT, Burla	15 th Dec 2018	16 th Dec 2018	All the task starting from conference approval to closing of event with audit report	Organized as Organizing Chair

8. Awards/ Recognition Received:

Sl. No.	Name of Award/ Recognition	Awarding Organization	Date	Remarks
1	Outstanding Reviewer for the Journal "Journal of King Saud University Computer and Information Sciences"	Elsevier Publications, USA	June 2017	For Contribution as Reviewer
2	Young Faculty in Engineering	Centre for Advanced Research and Design (CARD), Venus International Foundation, Chennai, India	8 th JULY 2017	For Contribution and achievement in the field of Computer Science & Engineering

9. International Conference Organized:

- International Conference on Computational Intelligence in Data Mining – 2017, 11-12 November 2017, VSSUT, Burla, Odisha (**Role: Convenor & Volume Editor**)
- International Conference on Computational Intelligence in Data Mining – 2018, 15-16 December 2018, VSSUT, Burla, Odisha (**Role: Organizing Chair & Volume Editor**)
- International Conference on Computational Intelligence in Pattern Recognition – 2019, 19-20 January 2019, IEST, Shibpur, West Bengal (**Role: Program Chair & Volume Editor**)

10. Editorial Information

- Guest Editor of International Journal of Computational Intelligence Studies, Inderscience Publication, Switzerland
- Guest Editor of Neural Computing and Application (Journal), Springer Publication, USA
- Guest Editor of Int. J. of Swarm Intelligence, Inderscience Publication, Switzerland
- Guest Editor of Evolutionary Intelligence (Journal), Springer Publication, USA
- Guest Editor of International Journal of Computational Systems Engineering, Inderscience Publication, Switzerland
- Editor of AISC Springer Proceeding of International Conference ICCIDM-2017, at VSSUT, Burla, Odisha.
- Editor of AISC Springer Proceeding of International Conference ICCIDM-2018, at VSSUT, Burla, Odisha.
- Editor of AISC Springer Proceeding of International Conference CIPR-2018, at IEST Shibpur, West Bengal.

Declaration

I hereby declare that the information given above is correct to the best of my knowledge and belief.



Date: 20th January 2019

Bighnaraj Naik

Place: Burla, Odisha, India