**Bio-Data**

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| --- | --- |
| **BIGHNARAJ NAIK, Ph.d.**  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**](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**](http://orcid.org/0000-0002-9761-8389)  **Google Scholar Profile:** [**https://scholar.google.co.in/citations?user=prT5L5UAAAAJ**](https://scholar.google.co.in/citations?user=prT5L5UAAAAJ) | **My_Photo** |

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**

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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 | Percentage 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**) | SOA University, Bhubaneswar, 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: 27th 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 | ***Neural Computing and Applications***, **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 | ***Journal of Classification,* 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 | ***Journal of King Saud University - Computer and Information Sciences*, ELSEVIER**  **[SCOPUS**] | Vol. 30, Issue 1, January 2018, pp. 120-139 |
| 5 | Hybrid Chemical Reaction based Metaheuristic with Fuzzy c-means Algorithm for Optimal Cluster Analysis | Janmenjoy Nayak, B., Naik, H. S., Behera, A., Abraham | ***Expert Systems With Applications,* ELSEVIER**  [**Impact Factor : 3.928, SCI, SCIE, SCOPUS**] | **Vol.**  79 , pp. 282–295, (2017) |
| 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 | ***Ain Shams Engineering Journal***, **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](http://www.sciencedirect.com/science/article/pii/S0925231215018494) | Bighnaraj Naik, Janmenjoy Nayak and H.S. Behera | ***Neurocomputing*, 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 | [***International Journal of Business Information Systems***](http://www.inderscience.com/jhome.php?jcode=ijbis)**,****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 | ***Engineering Science and Technology, an International Journal*,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 | 1. ***Egyptian Informatics Journal*, ELSEVIER** 2. **[ESCI, SCOPUS**] | Vol. 17, Issue 1, March 2016, pp. 57-87. |
| 11 | A novel Chemical Reaction Optimization based Higher Order Neural Network (CRO-HONN) for nonlinear classification | Janmenjoy Nayak, Bighnaraj Naik, H. S. Behera | 1. ***Ain Shams Engineering Journal,* ELSEVIER** 2. **[ESCI, SCOPUS**] | Vol. 6, Issue 3, September 2015, pp. 1069-1091 |
| 1**2** | A Comprehensive Survey on Support Vector Machine in Data Mining Tasks: Applications & Challenges | Janmenjoy Nayak, Bighnaraj Naik, H. S. Behera | 1. ***International Journal of Database Theory and Application*,** **SERSC Publishing**, Republic of Korea 2. **[SCOPUS**] | Vol. 8(1): 169-186,(2015) |
| 13 | A survey on virtual sensor networks framework | 1. Himansu Das, Bighnaraj Naik, Bibudendu Pati, and Chhabi Rani Panigrahi. | 1. International Journal of Grid Distribution Computing 2. **[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 | 1st International Conference on Soft Computing in Data Analytics,   1. 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 | 1st International Conference on Soft Computing in Data Analytics,   1. 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 | 17th 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. 1st 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 | 4th 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 | 3rd 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 International Publishing**. **[SCOPUS**] | CMR Technical Campus, Hyderabad,  Date : 24-26 July 2015 |
| 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 report to NIELIT. | Actively Participated. |
| 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 | 11th Nov 2017 | 12th 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 | 15th Dec 2018 | 16th 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 | 8th JULY 2017 | For Contribution and achievement in the field of Computer Science & Engineering |

1. **International Conference Organized:**

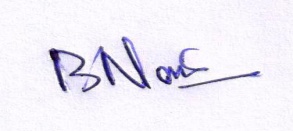
* International Conference on Computational Intelligence in Data Mining – 2017, 11-12 November 2017, VSSUT, Burla, Odisha **(Role: Convenor & Volume Editor)**
* International Conference on Computational Intelligence in Data Mining – 2018, 15-16 December 2018 , VSSUT, Burla, Odisha **(Role: Organizing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

1. **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 IIEST Shibpur, West Bengal.

**Declaration**

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



Date: 21st February 2019 Bighnaraj Naik

Place: Burla, Odisha, India