

Om Prakash Jena

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Carrier Objective:

To contribute to a highly professional and skilled environment, conduct my duties and responsibilities consistently with sincerity, and to work in functional areas where my capabilities and skills are best explored and enhanced.

Preferred Subject:

Theory of Computation, Compiler Design, DBMS, Cryptography, Pattern Recognition, Discrete Mathematics, Probability & Statistics, Soft Computing, Machine Learning, Deep Learning, Text Analytics and Natural Language Processing

Summary of Qualifications:

- Consistent and Outstanding academic records throughout my education.
- Crystal clear understanding of the underlying principles of the subject and its relevancy to other domains

- In-depth knowledge of various techniques and approaches applied to the subject
- ➤ Perfect knowledge about the common job duties of a lecturer and ability to perform them efficiently
- ➤ A little familiarity with the general administrative environment at educational institutes and idea about their practices
- Highly innovative in depicting the subject matter to the students/audience, using traditional methods as well as modern aids
- Superb proficiency at computer aided teaching and web search engines.

Extra Qualification:

UGC NET JRF qualified in Computer science application for Lectureship/JRF in Dec-2012 session.

Professional Qualification:

- Presently working at Department of Computer Science, Ravenshaw University as Assistant Professor since July 2014.
- Worked at College of Engineering (CEB) as Assistant Professor in Computer Science from Sept 2012 to July 2014
- •Worked at Indian Institute of Science & Information Technology (IISIT) as Lecturer in Computer Science application from July 2011 to Sept 2012
- PhD in the area of Pattern Recognition/classification in the Department of Computer science & Applications under Utkal University.
- M.Tech Programme in computer science from Utkal University with 81% and honors in the session 2011-13

• Master in Computer Application with 8.51 CGPA from Indian Institute of Science & Information Technology under BPUT, Rourkela in 2011

Research Publication Details:

- 1. **O. P. Jena**, S. K. Pradhan, P. K. Biswal and S. Nayak, "Implementation of Linear Discriminant Analysis for Odia Numeral Recognition," IEEE 2018 International Conference on Information Technology (ICIT), Bhubaneswar, India, 2018, pp. 166-171.
- 2. **O. P. Jena**, S. K. Pradhan, P. K. Biswal and S. Nayak "Odia Printed character Recognition using Principal Component Analysis". Springer ICCIDA
- 3. **O. P. Jena**, S. K. Pradhan, P. K. Biswal and S. Nayak "Odia Character Recognition Using Curvelet Transform with DWT Feature Extraction" International conference on Applied Machine Learning(ICAML2019), IEEE
- 4. **O. P. Jena**, S. K. Pradhan, P. K. Biswal and S. Nayak "Recognition of Printed Odia Character and Digits using Optimized Self-Organizing Map" International Conference On Computer Science, Engineering and Applications. (ICCSEA 2020). March 13 14, 2020. IEEE.
- 5. **O. P. Jena**, S. K. Pradhan, P. K. Biswal, A.R Tripathy and S. Nayak "Hidden Markov Model based Odia numeral recognition using Moment and Structural Features" International Journal of Engineering and Advanced Technology ISSN: 2249-8958, Vol 8 2019, pp2317-2325. Scopus Indexed
- 6. **O. P. Jena**, S. K. Pradhan, P. K. Biswal, A.R Tripathy "Odia Characters and Numerals Recognition using Hopfield Neural network based on Zoning Feature".

 "International Journal of Recent Technology and Engineering ISSN: 2277-3878,

 Volume-8 Issue-2 July 2019 pp 4928-4937 Scopus Indexed
- 7. S. Nayak, S. K. Pradhan, P. K. Biswal, and **O. P. Jena** "Classification Performance Analysis of Printed Odia alphabets using Neural network based Approaches" Fifth International Conference on Image Information Processing (ICIIP -2019) November 15 17, 2019, IEEE

- 8. S. Mallik and **O.P Jena** "Analysis of Security Vulnerabilities of Internet of Things and its solutions" International Conference on Machine Learning, IoT and Big Data (ICMIB) September 2020.Lecture Notes in Networks and Systems, Springer.
- 9. R. Nayak, **O. P. JENA**, A. R. Tripathy, S Rath, A Tripathy "A NEW BOOSTING CONVOLUTIONAL TECHNIQUE FOR INCREASING SECURITY IN WIRELESS SENSOR NETWORK" Advances in Mathematics: Scientific Journal 9 (2020), no.7, 4397–4404, https://doi.org/10.37418/amsj.9.7.10
- 10. **O. P. JENA**, A. TRIPATHY, S. SWAGATAM, S. RATH, A. Tripathy "DUAL ENCRYPTION MODEL FOR PRESERVING PRIVACY IN CLOUD COMPUTING" Advances in Mathematics: Scientific Journal 9 (2020), no.9, 6667–6678. https://doi.org/10.37418/amsj.9.9.24
- **11.**Tripathy A., Tripathy A.R., Rath S., **Jena O.P.**, Swagatika S. (2021) Rivest Cipher 4 Cryptography and Elliptical Curve Cryptography Techniques to Secure Data in Cloud. Intelligent and Cloud Computing. Smart Innovation, Systems and Technologies, vol 194. Springer, Singapore.pp-661-668 https://doi.org/10.1007/978-981-15-5971-6_69.
- **12. O.P. Jena**, A.R Tripathy, S.K Patra, M.R Chowdhury, R.K Sahoo "Automatic Text Simplification Using LSTM Encoder Decoder Model" International Conference on Advances in Distributed Computing and Machine Learning (ICADCML-2021) Springer, Lecture Notes in Networks and Systems (LNNS) Jan 2021 https://doi.org/10.1007/978-981-16-4807-6_23
- **13.** S. S Patra, **O. P. Jena**, S. Bhattacharya , J. R. Mohanty, S. Rout, R. K. Barik"QH2O: a Novel Quasi-Reflected Harris Hawks Task Scheduling Scheme For Green Environment"International Conference on Sustainability and EquityDigital Society, Nov 2020, IEEE.
- 14. **O. P. Jena**, P.S. Pattnayak "Green IoT based Technology for Sustainable Smart Cities" International Conference on Innovative Computing and Communication (ICICC-2021) Feb 2021, Elsevier Series.https://dx.doi.org/10.2139/ssrn.3834226
- 15. S. Pramanik, K M Sagayam, **O.P Jena** "Machine Learning Framework in Cancer Detection" International Conference of Computer Science and Renewable Energies 2021, Agadir, MoroccoDOI: https://doi.org/10.1051/e3sconf/202129701073.

- 16. Jeba Kumar R.J.S, Deepika Blessy Telagathoti, K Martin Sagayam, Sabyasachi Pramanik, **Om Prakash Jena**, Samir Bandyopadhyay "Speckle noise removal by SORAMA segmentation in Digital Image Processing to facilitate precise robotic surgery" September 2021, International Journal of Reliable and Quality E-Healthcare 11(2) Scopus Indexed.
- 17. Sradhanjali Nayak, Pradyut Kumar Biswal, **Om Prakash Jena** "Shape Feature Based Multi-Class Classification Approach Towards Odia Characters Employing Extreme Learning Machine" Sixth International Conference on Image Information Processing (ICIIP-2021), 26 28 November, 2021. IEEE Conference.
- 18. Sabyasachi Pramanik, Subhankar Joardar, **Om Prakash Jena**, Ahmed J. Obaid "An Analysis of the Operations and Confrontations of Using Green IT in Sustainable Farming" Second International Conference on Modern Applications of Information and Communication Technology (MAICT_2021), Kufa, Iraq AIP Conference Proceedings.
- **19.** Sabyasachi Pramanik, Martin Sagayam K, Ahmed J Obaid, Om Prakash Jena, Mohd Helmy Abd Wahab "Intelligent Agent Facilitated e-Commerce" The 13th International Conference on Intelligent Human Computer Interaction (IHCI-2021), December 20th 22nd, 2021, Kent State University, USA
- 20. S. Nayak, S. K. Pradhan, P. K. Biswal, and **O. P. Jena** "Implementation of an integrated classification approach of Adaptive Extreme Learning Machine and correlation based feature selection for Odia complex characters" International Journal of Information Technology,2022.

Book Chapters:

- **1.** P. Pattnayak, **Om Prakash Jena** "Innovation on Machine Learning in Healthcare Services- An Introduction" Chapter 1 Book "Machine Learning for Healthcare Applications", pp 1-14, 2021, Wiley Scrivener Publisher. https://doi.org/10.1002/9781119792611.ch1
- 2. Niranjan Panigrahi, Ishan Ayus and **Om Prakash Jena**, "An Expert System-Based Clinical Decision Support System for Hepatitis-B Prediction and Diagnosis" Chapter 4

- Book "Machine Learning for Healthcare Applications", pp. 57-75, 2021, Wiley Scrivener Publisher.https://doi.org/10.1002/9781119792611.ch4
- 3. K. Paramesha, Gururaj H.L and **Om Prakash Jena** "Applications of Machine Learning in Biomedical Text Processing and Food Industry" Chapter 10 Book "Machine Learning for Healthcare Applications", pp. 151-167, 2021, Wiley Scrivener Publisher.https://doi.org/10.1002/9781119792611.ch10
- 4. Sudhansu Shekhar Patra, **Om Prakash Jena**, Gaurav Kumar, Sreyashi Pramanik, Chinmaya Misra, Kamakhya Narain Singh "Random Forest Algorithm in Imbalance Genomics Classification" Book Title "Data Analytics in Bioinformatics: A Machine Learning Perspective" 18 January 2021 https://doi.org/10.1002/9781119785620.ch7, Wiley Scrivener Publication, USA.
- 5.P. Pattnayak, **O.P. Jena**, S. Sinha "Cloud and Green IoT-Based Technology for Sustainable Smart Cities" Book Title "Green Engineering and Technology Innovations, Design, and Architectural Implementation" Chapter-1 CRC Press USA 2021 ISBN: 9780367758059 Page: 1 to 19.
- 6. A.B Gadicha, V.B. Gadicha, **O.P. Jena** "E-Navigation: An Indoor System for Green City Sustainable Development Using an UGU Engine architecture" Book Title "Green Engineering and Technology Innovations, Design, and Architectural Implementation" Chapter-4 CRC Press USA 2021 ISBN: 9780367758059 Page: 57 to 70.
- 7. S.A.L. Amodi, S.S. Patra, **O.P. Jena**, S. Bhattacharya, N.S. Goje, R.K Barik "Green Health: Making Green Healthcare Using Reinforcement Learning in Fog-Assisted Cloud Environment" Book Title "Green Engineering and Technology Innovations, Design, and Architectural Implementation" Chapter-15 CRC Press USA 2021 ISBN: 9780367758059 Page: 259 to 271.
- 8. Riddhi Chatterjee, Ratula Ray, Satya Ranjan Dash and **Om Prakash Jena** "Conceptualizing Tomorrow's Healthcare Through Digitization" Book Title "Computational Intelligenceand Healthcare Informatics" 2021, Chapter 19 Pp. 361-376 Wiley Scrivener Publication, USA.
- 9. Pitambar Behera and **Om Prakash Jena** "Domain Adaptation of Parts of Speech Annotatorsin Hindi Biomedical Corpus: An NLP Approach" Book Title "Computational

Intelligenceand Healthcare Informatics" 2021 Chapter 20 Pp. 377-392Wiley Scrivener Publication, USA.

- **10.** Barnali Sahu, Sitarashmi Sahu, **Om Prakash Jena** "Impact of Ensemble-based Models on Cancer Prognosis, Its Development and Challenges" Book title "Machine Learning and Deep Learning in Efficacy Improvement of Healthcare Systems" 2021 Chapter 8CRC Press USA 2021 ISBN: 9781032036724.
- 11. Amira Hassan Abed, Essam M Shaaban, **Om Prakash Jena**, Ahmed A. Elngar "A Comprehensive Survey On Breast Cancer Thermography Classification Using Deep Neural Network". Book Title "Machine Learning and Deep Learning in Medical Data Analytics and Healthcare Applications" 2021 Chapter 9 CRC Press USA 2021 ISBN: 9781032126876. https://doi.org/10.1201/9781003226147
- 12. Madhumita Pal, Kuldeep Dhama, Smita Parija, **Om Prakash Jena** and Ranjan K. Mohapatra "Machine Learning Algorithms And Covid-19; A Step For Predicting Future Pandemics: A Systematic Overview."Book Title "Machine Learning and Deep Learning in Medical Data Analytics and Healthcare Applications" 2021 Chapter 11CRC Press USA 2021 ISBN: 9781032126876. https://doi.org/10.1201/9781003226147
- 13. Sibabrata Mohanty, Kali Charan Rath and **Om Prakash Jena** "Implementation of Total Productive Maintenance (TPM) In Manufacturing Industry for Improving Production Effectiveness" Chapter 3 Book Title "Industrial Transformation: Implementation and Essential Components and Processes of Digital Systems" 2021 Taylor & Francis Publication.
- 14. Ajay B Gadicha, Vijay B Gadicha, **Om Prakash Jena** "Mechanism to protect Decentralized Transaction Using Blockchain Technology" Chapter 12 Book Title "Machine Learning Adoption in Blockchain-Based IntelligentManufacturing: Theoretical Basics, Applications, and Challenges". 2021 Taylor & Francis Publication.
- **15.** Ali Aloss, Barnali Sahu, **Om Prakash Jena** "Crow Search Algorithm: A Systematic Review" Chapter 7 Book Title "Augmented Intelligence: Deep Learning, Machine Learning, Cognitive Computing, Educational Data Mining" 2021, Bentham Publisher USA.
- 16. Paryati, Krit Salahddine, Om Prakash Jena, Ahmed A. Elngar "IMPLEMENTATION OF GENETIC ALGORITHM TO COMPLETE TRANSPORTATION PROBLEMS OF INTERCITY BUS

VEHICLES". Chapter 10 Book Title "Augmented Intelligence: Deep Learning, Machine Learning, Cognitive Computing, Educational Data Mining" 2021, Bentham Publisher USA.

- 17. P. Satheesh Kumar, T. Balakumaran, **Om Prakash Jena** "COMPACT MULTIBAND ULTRA-THIN ON-BODY FRACTAL ANTENNA FOR WEARABLE HEALTH INFORMATICS". Book Title "Augmented Intelligence: Deep Learning, Machine Learning, Cognitive Computing, Educational Data Mining" Chapter 12, 2021, Bentham Publisher USA.
- 18. Sudhansu Shekhar Patra, Mamta Mittal, Om Prakash Jena "Multi objective evolutionary algorithm based on decomposition for feature selection in medical diagnosis" Book Title "Predictive Modeling in Biomedical Data Mining and Analysis" Academic Press, Science Direct, Advanced Studies in Complex Systems: Theory and Applications, 2022, Pages 253-293, https://doi.org/10.1016/B978-0-323-99864-2.00005-6

Text Book:

- 1. Om Prakash Jena, Himanshu Sekhar Acharya, Alok Ranjan Tripathy, Sashi Bhusan Nayak "Database Systems" Kalyani Publishers. ISBN Number: KLYDEL0000031,2021
- 2. Himanshu Sekhar Acharya, Alok Ranjan Tripathy, Om Prakash Jena "Java Programming". Kalyani Publishers. ISBN Number: KLYDEL0000028,2021
- 3. Himanshu Sekhar Acharya, Alok Ranjan Tripathy, Om Prakash Jena "Web Technologies". Kalyani Publishers. ISBN Number: 9789355401281,2021
- 4. Om Prakash Jena, Himanshu Sekhar Acharya, Alok Ranjan Tripathy, S Mohapatra "Unix Shell Programming" Kalyani Publishers ISBN: 9789355401274., 2022

5. Om Prakash Jena, Himanshu Sekhar Acharya, Alok Ranjan Tripathy, S Mohapatra "Algorithm Design Techniques with Practical" Kalyani Publishers ISBN: 9789355401007, 2022.

Book Editor:

- 1. Om Prakash Jena, Sachi Nandan Mohanty, G. Nalinipriya, Achyuth Sarkar "Machine Learning for Healthcare Applications" Wiley-Scrivener Publisher, March 2021.ISBN: 1119791812 https://doi.org/10.1002/9781119792611
- 2. Om Prakash Jena, A.R Tripathy, Z. Polkowski "Green Engineering and Technology: Innovations, Design and Architectural Implementation" CRC-Press Taylor & Fransics Group, In June 2021 ISBN 9780367758059.https://doi.org/10.1201/9781003176275
- 3. Om Prakash Jena, A.R Tripathy, A. Elgnar, Z. Polkowski "Computational Intelligence and Healthcare Informatics", Wiley-Scrivener Publisher, In Press ISBN: 9781119818687.
- 4.Om Prakash Jena, A.R Tripathy, A. Elgnar and Brojo Kishore Mishra "Augmented Intelligence: Deep Learning, Machine Learning, and Cognitive Computing, Educational Data Mining" Bentham Publication. ISBN: 978-981-5040-41-8 2022 DOI:10.2174/97898150404011220301
- 5. Om Prakash Jena, Bharat Bhusan, Nitin Rakesh, Parma Nand Astya, Yousef Farhaoui "Machine Learning and Deep Learning in Efficacy Improvement of Healthcare Systems." CRC-Press Taylor & Fransics Group, ISBN 9781032036724, 2022 https://doi.org/10.1201/9781003189053
- 6. *Om Prakash Jena, Bharat Bhusan,* Utku Kose "Machine Learning and Deep Learning in Medical Data Analytics and Healthcare Applications" *CRC- Press Taylor & Fransics Group, 2022.* ISBN 9781032126876. https://doi.org/10.1201/9781003226147
- 7. Om Prakash Jena, S. Patra, Mrutunjay Panda, Z. Polkowski, S. Balamurugan "Industrial Transformation: Implementation and Essential Components and Processes of Digital Systems" CRC-Press Taylor & Francis Group, 2022 ISBN 9781032133980, https://doi.org/10.1201/9781003229018
 - 8. **Om Prakash Jena**, Sabyasachi Pramanik, Ahmed A. Elngar "Machine Learning Adoption in Blockchain-Based Intelligent Manufacturing: Theoretical Basics, Applications and Challenges" CRC-Press Taylor & Francis Group, 2022 ISBN 9781032171531.

- 9. **Om Prakash Jena**, Mrutyunjaya Panda, Utku Kose "Medical Data Analysis and Processing using Explainable Artificial Intelligence". CRC-Press Taylor & Fransics Group, In Progress.
- 10. Om Prakash Jena, Gururaj H L, Pooja M R, Pavan Kumar S P "Methods, Implementation, and Application of Cyber Security Intelligence and Analytics" IGI Global Publisher, USA DOI: 10.4018/978-1-6684-3991-3, ISBN13: 9781668439913, 2022, Scopus Indexed
 - 11. **Om Prakash Jena,** Prasenjit Chatterjee, Valentina Emilia Balas, Mrutunjay Panda "**Computational Methods for Optimizing Manufacturing Technology**", River Publication, IEEE, USA In Progress.

Journal Editor/Reviewer:

- 1. Editorial Member of International Journal of Advances in Data and Information Systems (IJADIS) ISSN 2721-3056.
- 2. Reviewer Committee member of Journal of Computer Science, Science Publications, ISSN 1549-3636.
- 3. Editorial Member of International Journal of Data Science and Technology (IJDST) ISSN 2472-2235.
- 4. Session Chair International Conference on Computational Research and Data Analytics (ICCRDA-2020). 24th October 2020, Organized by Suleyman Demirel University and Isparta Applied Science University, Turkey and College of Engineering Roorkee.
- 5. Session Chair in IEEE International Conference on Advent Trends in Multidisciplinary Research and Innovation (ICATMRI-2020) organized by PLITMS Buldhana, India 30th December 2020.
- 6. Session Chair in International Conference on Innovative Computing and Communication (ICICC 2021) 20th-21st February 2021 Organized by SSCBS, University of Delhi, NIT Patna and University of Valladolid, Spain.

- 7. Reviewer Committee member of journal International Journal of Intelligent Communication, Computing and Networks (ISSN:2582-7707).
- 8. Program committee member in International Conference on Advances and Applications of Artificial Intelligence and Machine Learning (ICAAAIML2021), October 29-30, Sharda University.
- 9. Conference EditorIraqi Academics Syndicate 2nd International Conference for Pure and Applied Sciences (IICPS 2021) University of Babylon 14-15 November, 2021
- 10. Invited Speaker International Conference of Computer Science and Renewable Energies 2021, Agadir, Morocco.
- 11. Technical Program committee member of 11th International Advanced Computing Conference (IACC) on 18th & 19th December, 2021 at University of Malta, Malta, Europe.
- 12. Resource Person for Faculty Development Program on "Latest Technologies and Their Applications in Electrical Engineering and Future Energy" 16th -20th August, 2021, Maharaja Agrasen Institute of Technology, Delhi, India.
- 13. International Advisory Board Committee member of International Conference on Internet of Things and Smart Applications(ICIoTSA2022), Beni-Suef City, Egypt, July 29-31, 2022.
- ¹⁴·Technical Program Committee of IC4S-2021 (Fourth International Conference on Computing, Communications and Cyber Security (IC4S-2021)), India.
- 15. Technical Advisory Committee Member of International Conference on Role of ICT in Management and Business: Practices, Trends and Prospects (ICRIMB-2022), New Delhi, India.
- 16. Technical Advisory Committee Member of Second International Conference on Computer Science, Engineering and Applications (ICCSEA) GIET University, Gunupur, India on 8-Sep-2022.

- 17. Organizing committee member of International Conference On Innovations in Intelligent Computing and Communications, (ICIICC- 2022) DEC 16-17, 2022 Springer conference
- 18. Program Committee member 12th Project Innovation Contest (PIC) 2023, International Conference on Distributed Computing and Internet Technologies (ICDCIT) 18th 22nd January 2023, KIIT (Deemed to be University), India
- 19. Reviewer of International Journal of Systematic Innovation (IJoSI)

Awards/Achievement:

1. Best researcher Award in "International Scientist Awards on Engineering, Science and Medicine" 07-08 August 2021, Pondicherry, India.

Patents:

1. Title of the Invention: Lung Cancer Detection and Recommender System using Deep

Learning. Intellectual Property India Patent Govt. of India

Application Number: 202041043972

Filing Date: 09/10/2020 Date of Published: 16/10/2020.

2. Title of the Invention: Device for Automatic Contactless Dispensing of Masks and Sanitizers for use during COVID-19 Pandemics, Intellectual Property India Patent

Govt. of India

Application Number: 202011043517

Filing Date: 06/10/2020 Date of Published: 23/10/2020.

3. Title of the Invention: Sensor Based Smart Railway System to Minimize Train Collisions and Accidents

Application Number: 202041045313

Filing Date: 18/10/2020 Date of Published: 30/10/2020.

4. Title of the Invention (Design Patent):IoT Based Disinfectant Sanitizer

Tunnel for Covid-19.

Application Number: 333094-001 CBR Number: 16265

Filing Date: 11/09/2020

5. Title of the Copyright: IOT Based Mobile Operated Solar Ball Mill

Diary Number: 26451/2021-CO/L Date of Approval: 14/12/2021

Research Guidance:

• Number of MTech students: 10

• Number of PG students: 40

Number of Patents: 05

Adminstrative Work:

- NAAC coordinator of the department along with team member in University NAAC Core committee.
- NSS programme officer for the department of computer science and History of Ravenshaw University.
- Exam-in-charge of department of Computer Science and MCA of Ravenshaw University.

Personal Profile:

Date of Birth :05/04/1986
Nationality : Indian.
Gender : Male.
Marital status : Married.

• Strength : Quick learner, Optimistic, Self-confident.

• Languages known: English, Hindi and Oriya.

• Hobbies : Playing cricket, Listening Music

Date:

Place: Bhubaneswar (Om Prakash Jena)