

1. SUMMARY:

- **Ph.D.- Information Technology (Pursuing- Domain: Machine learning) M.E. (Computer Engineering)**

- **Industry Experience**

- 2 months(**Technical Consultant- Aventure of M/s Bhimii & Sons, Mumbai**)
- 6 months (**Senior Software Engineer - Zyden IT Solutions, Thane**)
- 6 months(**Software Tester- I-net systems, Pune**)

- **Affiliations with Professional Bodies**

ISTE:

IAENG:

AICTSD:

Institute of Scholars :

- **Awards, Recognition received**

1. **Young researcher award 2021**, Institute of scholars Bangalore for the work publication type **patent work** title: **Realistic electric load profiling system of textile mills by considering dynamic and stochastic behavior using GAN**, Feb 2021
2. **Best paper award** College of engineering and technology, Dindigul Tamilnadu, Paper titled " **Explore and analysis of methods to train CNN in a machine learning environment**" in a virtual conference on smart computing and advanced communication(SAC21), March 2021
3. **Best Session Paper Award** for the paper entitled, "**Developing a Parking monitoring system**", in International Conference on Computing technologies for Transforming the Automated World (ICCTAW' 2020) organized by the Department of Computer Engineering, Atharva College of Engineering on 22nd-23rd April 2020.
4. **Patent Application Publication**, Title Of The Invention: **Deep Neural Network Based Offloading Of Video Surveillance IoT Applications In Cloud Computing**, Application No.202121023777 A
5. **Patent Number: 2020102678**, **Realistic electric load profiling system of textile mills by considering dynamic and stochastic behavior using GAN**, date grant: **13th Jan 2021**
6. Guide for the project title, "**Churn prediction in the banking sector**," selected in Student project selected under Student Project Programme 2021(SPP) by Institute of scholars Bangalore
7. Copyright: Registration Number: L-107983/2021," **Determined deep models using perturbed samples**

- **Research Experience :**

1. **List of the Journals publishing engineering education/education research where contributed as a Reviewer**

1. Reviewer, Journal of engineering education transformations(JEET)-2021
2. Reviewer Member for "Acta Scientific Medical Sciences Review Board" till date
3. Adhoc Reviewer for "international journal of ambient computing and intelligence (ijaci)" till date
4. Reviewer Member for "European journal of volunteering and community-based projects" 2021
5. Reviewer Member for , "Walailak Journal of Science and Technology (WJST)"2021
6. Reviewed paper for , "The Open Bioinformatics Journal" 2021

2. **List of the conferences of engineering education/education research contributed as a Reviewer**

7. Reviewer for 2021 Workshop on an algorithm and Big data (WABD 2021) ACM ICPS

8. Reviewer for 12th International Conference on Society and Information Technologies: **ICSIT 2021 / 2022** organized by International Institute of Informatics and Systemics **U.S.A.**
9. Reviewer for The 12th International Multi-conference on Complexity, **Informatics and Cybernetics- March 9-12,2021 /2022** virtual conference organized by International Institute of Informatics and Systemics **U.S.A.**
10. TPC member for The 2020 International conference on decision aid sciences and applications(**DSDA'20**) 8th-9th November 2020, online organized by College of Business Administration at the **University of Bahrain.**
11. **Program Chair** and panelist at the International conference, **ICIATE 19** at Atharva College of Engineering Malad West Mumbai
12. **Reviewer Member** for International Conference on Convergence to Digital World- Quo Vadis (**ICCDW-2020**)
13. **Reviewer Member** for International Conference on Computing technologies for Transforming the Automated World (**ICCTAW' 2020**)
14. **Session Chair** for International Conference **ICIATE-2017** Atharva College of Engg. Mumbai
15. **Reviewer, PC Member** for International Conference **ICIATE-2017** Atharva College of Engg. Mumbai
16. **Program Chair** at the International conference, **IFERP Unit of VVERT**, 5th April 2015, 28th June 2015

3. List of the Journals publishing engineering research, where you have contributed as an Associate Editor

17. **Editorial Board Member** for science publishing group 2020
18. Reviewer Member for “**Acta Scientific Medical Sciences Review Board**”
19. **Guest Editor** for a Special Issue on **Advanced Deep Learning Methods for Audio and Speech processing**, Bailey Johnson Editorial Assistant Science Publishing Group, USA(Submission Deadline: Feb. 20, 2020)

● **Published Paper:**

1. Aruna Pavate And Prof. Nazneen Ansari, “**Prediction and analysis of disease through data mining techniques**”, in International Conference on emerging trends in Engineering and Technology Mumbai, Vol. 3 - Issue 11 (December - 2014)
2. Aruna Pavate And Pranav Nerurkar, “**Performance Analysis Of Cloud-Based Penetration Testing Tools**”, in International Journal of Engineering Research and Technology, Vol. 3 - Issue 2 (February - 2014)
3. Aruna Pavate, Pranav Nerurkar, And Prof. Nazneen Ansari, “**Controlling Devices Using An Ubiquitous 3-D Spatial Interaction**”, presented a paper in International Conference and workshop on Advanced Computing(ICWAC-2014) on emerging trends in Engineering and Technology Mumbai, (March - 2014)
4. Aruna Pavate And Animish Pavate, “**Cloud Computing Solutions and Implementation of Private Cloud**”, in International Journal of Contemporary Research in Computer Science and Technology, Vol. 1 - Issue 4(July - 2015)
5. Aruna Pavate And Pranav Nerurkar, “**Study Of Angular Js: A Client-Side JavaScript Framework For Single Page Applications**”, in International Journal of Contemporary Research in Computer Science and Technology, Vol. 1 - Issue 4(July - 2015)
6. Aruna Pavate And Prof. Nazneen Ansari, “**Risk Prediction of Disease Complications in Type 2 Diabetes Patients Using Soft Computing Techniques**”, in International Conference on Advances in Computing and Communications, Kochi Kerala in sept.2015 IEEE.
7. Aruna Pavate, Divya Kumawat, “**Correlation of NoSQL & SQL Database**”, in IOSR Journal of Computer Engineering vol. 18, Issue 5, Ver.5 Sep.- Oct 2016
8. Aruna Pavate, Vanita Mestry, Rachna Hindlekar, Dheeraj, “**Hand Gesture Reorganization using Virtual Canvas**”, in National Conference on Technological Advancement and Automatization in Engineering, Volume 4, Issue 02,2016| ISSN:2321-0613
9. Aruna Pavate,“**Contingent Models for Integrating Multi-Source Heterogeneous Data**”, in National Conference on Technological Advancement and Automatization in Engineering, January 2016 ISSN:2321-0613
10. Aruna Pavate, Divya Kumawat, and Dr. Shrikant Kallurkar, "**Design and Development of Virtual Reality in Education: Comparative Analysis**", in International Journal of Engineering Research and Technology, (February - 2017)
11. Dhvani Patel, Nehal Ghosalkar and Aruna Pavate, "**Offline Signature Verification Using Artificial Neural Network**", in International Journal of Engineering Research and Technology, (February - 2017)
12. Santosh Mahadev Dodamani, Aruna Pavate, and Divya Kumawat, "**Content-Based Audiovisual Archive Retrieval: Multimedia Database**", in International Journal of Engineering Research and Technology, (February - 2017)
13. Lalithagayatri Thotakura, Priyanka Tawde, and Aruna Pavate, "**Fraud Detection in Health Insurance using Hybrid System**", in International Journal of Engineering Research and Technology, (February - 2017)

14. Divya Kumawat, Aruna Animish Pavate, and Santosh Dodamani, "**Comparative study of Nature Inspired Load balancing Algorithms**", in International Journal of Engineering Research and Technology, (February - 2017)
15. Gracy Joseph, Shravan Rao, Spurthi Shetty, and Aruna Pavate, "**Complete Animal Care System using Clustering Algorithm: CACS**", in International Journal of Engineering Research and Technology, (February - 2017)
16. Nitin Patil, Sushan Poojary, Ganesh Rane, Aruna Pavate, "**Keylogging Resistant Using Visual Authentication**", in International Journal for Scientific Research & Development (IJSRD), (April-2017)
17. AP Akshay Chougule, Sushant Gawade, Nimit Dave, "**Fitness Solution Using Hybrid Algorithm**", IOSR Journal of Engineering (IOSRJEN) 2, 57-60,2018
18. Suvarna Pansambal, Swati Shirke, Aruna Pavate, Divya Kumawat, "**Overview of Iris Recognition with Uibris.V2**", IOSR Journal of Engineering (IOSRJEN) 12, 5-8,2018
19. Aruna Pavate, Divya Kumawat, Suvarna Pansambal, Pranav Nerurkar, Dr. Rajesh Bansode "**Machine Learning Under Attack: Literature Survey**", IOSR Journal of Engineering (IOSRJEN) 14, 14-18, 2018
20. Rahul Jiwane, Sayali Bhagat, Samita Bhusare, Aruna Pavate, "**Intelligent Autonomous Six-Legged Robot Operate On Uneven Surfaces**", IOSR Journal of Engineering (IOSRJEN) vol. 14 , 52-55,2018
21. Aruna Pavate, Urvesh Rathod, Vaibhav Patil, "**Recommendation System Using Product Rank Algorithm For E-Commerce**", IOSR Journal of Engineering (IOSRJEN) 5, 56-61,2018
22. Divya Kumawat, Aruna Pavate, Suvarna Pansambal, "**Fog Computing and Its Comparative Study with Other Cloud-Based Technologies**", IOSR Journal of Engineering (IOSRJEN) 7, 09-12, 2018
23. Pranav Nerurkar, Aruna Pavate, Mansi Shah, Samuel J, "**Analysis of Probabilistic Models for Influence Ranking in Social Networks**", 3rd international conference on Computing, communication and Signal processing, Jan 2019
24. Pranav Nerurkar, Aruna Pavate, Mansi Shah, Samuel J, "**Performance of Internal Cluster Validation Measures for Evolutionary Clustering**", 3rd international conference on Computing, communication and Signal processing, Jan 2019
25. Aruna Pavate, Pranav Nerurkar, Nazneen Ansari, Rajesh Bansode, "**Early Prediction of Five Major Complications Ascends in Diabetes Mellitus Using Fuzzy Logic**", Conference paper First Online: 22 August 2018 Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 758), Soft Computing in Data Analytics pp 759-768
26. Urvash Rathod, Aruna Pavate, Vaibhav Patil "**Product Rank Based Search Engine for E-Commerce Unification of E-Commerce**" 2018 3rd International Conference for Convergence in Technology (I2CT) The Gateway Hotel, Xion Complex, Wakad Road, Pune, India. Apr 06-08, 2018
27. Aruna pavate, Pranav Nerurkar, Rajesh Bansode, Anita Chaudhari, Mansi Shah, "**Clump Approach for Animal Concern System**", 10th International Conference On Intelligent Systems And Communication Networks, Iosr-Jen, Issn (E): 2250-3021, Issn (P): 2278-8719 Pp 53-59
28. Aruna pavate, Divya Kumawat, Suvarna Pansambal, Anita Chaudhari, Apeksha Waghmare, "**Analogous investigation of Most commonly used Machine Learning Tools**", International Conference on Innovative and Advanced Technologies in Engineering, IOSR-JEN ISSN (e): 2250-3021, ISSN (p): 2278-8719 PP 24-29
29. Apeksha Waghmare, Suvarna Pansambal, Aruna pavate, Divya Kumawat, "**QR code-based Railway e-Ticket**" International Conference on Innovative and Advanced Technologies in Engineering", IOSR-JEN ISSN (e): 2250-3021, ISSN (p): 2278-8719 PP 16-23
30. Suvarna Pansambal, Apeksha Waghmare, Aruna pavate, Divya Kumawat, "**Cued Click Point-Based Authentication**", International Conference on Innovative and Advanced Technologies in Engineering, IOSR-JEN ISSN (e): 2250-3021, ISSN (p): 2278-8719 PP 30-34
31. Divya Kumawat, Aruna pavate, Apeksha Waghmare, Suvarna Pansambal, "**Study of data mining techniques for credit risk analysis & risk analysis by using decision tree algorithm**" International Conference on Innovative and Advanced Technologies in Engineering, IOSR-JEN ISSN (e): 2250-3021, ISSN (p): 2278-8719 PP
32. Aruna Pavate, Veda waikul, onkar Raghvan, "**Restaurant Review Classification and Recommendation System using SVM**" , 10th International Conference On Intelligent Systems And Communication Networks, Iosr-jen, Issn (E): 2250-3021, Issn (P): 2278-8719
33. Aruna Pavate*, Anita Chaudhari and Rajesh Bansode, Ms. Brinzel Rodrigues, "**Android Based Heart Monitoring Systems**", 10th International Conference On Intelligent Systems And Communication Networks Iosr-jen 978-1-7329562-1-6
34. Aruna Pavate*, Anita Chaudhari and Rajesh Bansode, "**Envision of Route Safety Direction Using Machine Learning**", Acta Scientific Medical Sciences (ISSN: 2582-0931) Volume 3 Issue 11 November 2019

35. Anujay Ghosh, Aruna Pavate," **Steady Model for Classification of Handwritten Digit Recognition**", Book Innovation in Electrical Power Engineering, Communication, and Computing Technology, PP 401-412,2020 Publisher, Springer, Singapore
36. Chintan kotian, Mohit jain, Aruna Pavate,"**D2F: Description to face synthesis using GAN**", International Conference On Recent Advances In Computational Techniques:E-icract 2020
37. Nidhi Kamble , Darshan Ganeshpure ,Aditya Katte Prof. Aruna Pavate ,” **Rainfall Prediction with Agricultural Soil Analysis**”, International Journal of Information Technology (IJIT) – Volume 6 Issue 5, Sep-Oct 2020, ISSN: 2454-5414
38. A. Pavate, A. Chaudhary, P. Nerurkar, P. Mishra and M. Shah, "**Cuisine Recommendation, Classification and Review Analysis using Supervised Learning**," 2020 International Conference on Convergence to Digital World - Quo Vadis (ICCDW), Mumbai, India, 2020, pp. 1-6, doi: 10.1109/ICCDW45521.2020.9318646.
39. Aruna Pavate, Rajesh Bansode (2021), **An Analysis of Derivative based Optimizers on Deep Neural Network Models** , book chapter Data Science and Data Analytics Opportunities and Challenges ISBN 9780367628826 August 20, 2021 by Chapman and Hall/CRC 496 Pages 232 B/W Illustrations
40. Shreyas Hingmire, Jawwad Khan, Ashutosh Pandey, and Aruna Pavate(2021),**Churn Prediction in Banking**, the Sector book chapter Data Science and Data Analytics Opportunities and Challenges ISBN 9780367628826 August 20, 2021 by Chapman and Hall/CRC 496 Pages 232 B/W Illustrations
41. Pavate A.A., Bansode R. (2021) **Performance Evaluation of Adversarial Examples on Deep Neural Network Architectures**. In: Balas V.E., Semwal V.B., Khandare A., Patil M. (eds) Intelligent Computing and Networking. Lecture Notes in Networks and Systems, vol 146. Springer, Singapore. https://doi.org/10.1007/978-981-15-7421-4_22
42. A. Kumar, A. Pavate, K. Abhishek, A. Thakare and M. Shah, "**Landmines Detection Using Migration and Selection Algorithm on Ground Penetrating Radar Images**," 2020 International Conference on Convergence to Digital World - Quo Vadis (ICCDW), Mumbai, India, 2020, pp. 1-6, doi: 10.1109/ICCDW45521.2020.9318660.
43. Aruna Pavate, Jay Mistry, Rahul Palve, Nirav Gami, "**Diabetic Retinopathy Detection-MobileNet Binary Classifier** ", Acta Scientific MEDICAL SCIENCES (ISSN: 2582-0931) Volume 4 Issue 12 December 2020
44. Kiran More and Pavate, Aruna and ., Suyog Nikam and ., Smit Thakkar, **Crop Yield Prediction Using Random Forest** Algorithm for Major Cities in Maharashtra State (2021). International Journal of Innovative Research in Computer Science & Technology (IJIRCST) ISSN: 2347-5552, Volume-9, Issue-2, March 2021,
45. Rodrigues, Richita and Pavate, Aruna and Sawant, Rujuta and Lopes, Nehal, **Smart Gate Pass Security Management System Using Random Key Generation (2021)**. International Journal of Innovative Research in Computer Science & Technology (IJIRCST) ISSN: 2347-5552, Volume-9, Issue-3, May 2021
46. Aruna Pavate, Dr. Rajesh Bansode, Dr. A. Prasanth. (2021). **Explore and Analysis of Methods to Train CNN in Machine Learning Environment**. Annals of the Romanian Society for Cell Biology, 14750–14761.
47. A. A. Pavate and R. Bansode, "**Evolutionary algorithm with self-learning strategy for generation of adversarial samples**" IJACI: Volume 13, Issue 1, Article 16 , 2022
48. A. A. Pavate and R. Bansode, "**Analyzing Probabilistic Adversarial Samples to Attack Cloud Vision Image Classifier Service**," 2021 International Conference on Data Analytics for Business and Industry (ICDABI), 2021, pp. 689-693, doi: 10.1109/ICDABI53623.2021.9655806
49. A. A. Pavate and R. Bansode, "**Design and Analysis of Adversarial Samples in Safety–Critical Environment: Disease Prediction System**", publication in process in the LNCVB series of Springer
50. Pavate, Aruna Animish and Rajesh Bansode. "**Generation of Adversarial Mechanisms in Deep Neural Networks: A Survey of the State of the Art**." IJACI vol.13, no.1 2022: pp.1-18. <http://doi.org/10.4018/IJACI.293111>

6. ACADEMIC :

- **EXAMINER:**
 - Paper setter, **Correction, Moderation, External Examiner** to other colleges affiliated to Mumbai University
 - Examiner (Internal and External) at S.R.T.M. university
 - Question **paper setter** in N.M.I.M.S. University, S.R.T.M University, Nanded

- **ROLES & RESPONSIBILITIES:**

- Involved in **guiding the UG level projects** for the B.E students at Mumbai University
- Worked as **Project Coordinator** in the Computer Department/IT at Atharva College of Engineering, Malad West, Mumbai.
- Class Incharge, Student Development Program Incharge, Research and Development Head at the department level, VR lab establishment

- **RESOURCE PERSON**

- Resource Person for one day workshop on “ **Introduction of R analytics** “, at Atharva College of Engg. Mumbai, March 2017
- Resource Person for a one-day session on “ **How to write scientific Research Paper**”, at St. John College of Engineering and Management, Palghar, 18th September 2019
- Resource Person for a one-day session on “ **How to write scientific Research Paper**”, at Atharva College of Engineering and Management, Malad West, Mumbai, September 2020
- Resource Person, “ **Machine learning-Recent trends and practices in Information Technology**”, hosted by the Department of Computer Application in association with IQAC of Kristu Jyoti Collège of Management and Technology. Kerala, on April 21, 2021
- Resource Person,” **Can digital-driven education minimize the role of Teachers?** “, hosted by the Rotary Club of Chennai Legends on Sept 15th, 2021
- Resource Person for R& D lecture, “ Navigating the Pathways of Research Publishing in Indexed Journals”, dept. Of information technology St. Francis institute of technology Mumbai university, India Jan 07th, 2022
- Resource Person for a one-day session on “ **Research Paper Writing for Beginners**”, at Atharva College of Engineering and Management, Malad West, Mumbai, 21st Feb 2022