

<b>Name of Teaching Staff</b>	Dr. Namita Pulgam	
<b>Designation</b>	Assistant Professor	
<b>Department</b>	Computer Science and Engineering (Data Science)  SVKM's Dwarkadas J. Sanghvi College of Engineering (DJSCE), Vile Parle, Mumbai	
<b>Date of Joining the Institution</b>	4 <sup>th</sup> November 2024	
<b>Email ID</b>	namita.pulgam@djsce.ac.in	
<b>Professional Membership</b>	<ul style="list-style-type: none"> <li>▪ ISTE (Membership no: LM 128823)</li> <li>▪ Orcid Id: 0000-0001-7725-0997</li> <li>▪ Scopus Id: 57205440683</li> <li>▪ Web of Science Researcher ID: CAF-5941-2022</li> <li>▪ Google Scholar Id: EiLxl9YAAAAJ</li> <li>▪ Vidwan ID: 296090</li> </ul>	
<b>Profile Links</b>	<ul style="list-style-type: none"> <li>▪ Web of Science Profile:  <a href="https://www.webofscience.com/wos/author/record/CAF-5941-2022">https://www.webofscience.com/wos/author/record/CAF-5941-2022</a> </li> <li>▪ Scopus Author Profile:  <a href="https://www.scopus.com/authid/detail.uri?authorId=57205440683">https://www.scopus.com/authid/detail.uri?authorId=57205440683</a> </li> <li>▪ Google Scholar Profile:  <a href="https://scholar.google.com/citations?hl=en&amp;user=EiLxl9YAAAAJ">https://scholar.google.com/citations?hl=en&amp;user=EiLxl9YAAAAJ</a> </li> <li>▪ Research Gate Profile:  <a href="https://www.researchgate.net/profile/Namita-Pulgam">https://www.researchgate.net/profile/Namita-Pulgam</a> </li> <li>▪ Vidwan Profile:  <a href="https://vidwan.inflibnet.ac.in/profile/296090">https://vidwan.inflibnet.ac.in/profile/296090</a> </li> </ul>	
<b>H-Index</b>	<ul style="list-style-type: none"> <li>▪ Google Scholar Citation Statistics (Citation Count =94, H-index = 6, i10index = 1)</li> <li>▪ Scopus Citation Statistics (Citation Count =27, H-index = 4)</li> </ul>	

<b>Area of Interest</b>	Pattern Recognition, Image Forensics, Image Processing, Computer Vision, Algorithm and Analysis
<b>Qualifications with Class/Grade:</b> <ol style="list-style-type: none"> <li>1. Ph. D. (Computer Engineering), Mumbai University 2024.</li> <li>2. M. E. (Computer Engineering), Mumbai University 2013, First Class.</li> <li>3. B.E. (Computer Engineering.), Mumbai University, 2005, First Class.</li> <li>4. H. S. C. (Computer Science), Maharashtra State Board of Secondary and Higher Secondary Education, 2001, First Class with Distinction.</li> </ol>	
<b>Total Experience in Years:</b> More than 19 years of Teaching Experience <ul style="list-style-type: none"> <li>• Assistant Professor, Ramrao Adik Institute of Technology, DY Patil Deemed to be University, Navi Mumbai, from 23/12/2005 to 27/10/2024.</li> </ul>	
<b>Courses Taught:</b> <ul style="list-style-type: none"> <li>• Algorithm and Complexity (PG)</li> <li>• Ethical Hacking and Digital Forensics (PG)</li> <li>• Data Structures (UG)</li> <li>• Analysis of Algorithm (UG)</li> <li>• Theory of Computer Science (UG)</li> <li>• Digital Signal and Image Processing (UG)</li> <li>• Image Processing (UG)</li> <li>• Pattern Recognition (UG)</li> <li>• Digital Forensics (UG)</li> <li>• Computer Graphics (UG)</li> <li>• Object Oriented Programming (UG)</li> <li>• CP-I &amp; II (UG)</li> </ul>	
<b>Projects Guided:</b> <ul style="list-style-type: none"> <li>• B.E. Project: more than 80</li> <li>• M.E. Project: 6</li> </ul>	
<b>Certification and Courses Completed:</b> <ul style="list-style-type: none"> <li>• Network Security Associates Level 1, 2 and 3 course by Fortinet, Eduskill Academy</li> </ul>	

<ul style="list-style-type: none"> <li>• Coursera course on Cybersecurity Awareness and Innovation, Programming for Everybody (Getting Started with Python), Python Programming Essentials, MachineLearning for all</li> <li>• IIT, Bombay Course on Introduction to Machine Learning</li> </ul>	
<b>PhD Guide ? Give field &amp; University</b>	
<b>Ph.D./Project Guided</b>	Master Level: 6 Students Guided
<b>Papers Published in Journal:</b>	14
<b>Papers Presented in International/National Conferences</b>	27
<b>Book Chapter</b>	1
<b>Books Published / IPRs / Patents</b>	9 Copyrights and 3 Patents (1 Published)
<b>Interaction with Professional Institutions</b>	<ul style="list-style-type: none"> <li>• Delivered expert talks on different topics such as Programming with Java and databases, C Programming, Step towards developing an application in excel etc.</li> <li>• Conducted lectures on Computer Programming in C Language for students of Bachelor of Business Application, Vijay Patil School of Management (VPSM), Nerul, Navi Mumbai.</li> </ul>
<b>Institute/Department Responsibility handled:</b>	<ol style="list-style-type: none"> <li>1. Developed “DYPHub: E-Railway Concession and E- Bonafide System” projects for RAIT</li> <li>2. Developed project “CO-PO Feedback System” for RAIT</li> <li>3. Designed “Digital Course File (DCF)” for calculating CO-PO attainment</li> <li>4. Central NAAC committee Member</li> <li>5. Department NBA coordinator</li> <li>6. NAAC Criteria-3 In-charge</li> <li>7. NBA auditor</li> <li>8. Final Year Project Coordinator</li> <li>9. SIH Judge</li> <li>10. Timetable Committee Coordinator</li> </ol>

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|  | 11. IQAC Member<br>12. DCF Coordinator |
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## Patents and Copyrights:

### A. Patent:

1. Published a Patent on “A Method to Secure Communication Between IoT Devices Through Cryptographic Hybrid Encryption Techniques”, Application Number: 202421038233, Date of Publication: 24/01/2025.
2. Filed a Patent on “A System and Method to Ensure A Secured Multi-Party Computation Framework”, Application Number: 202421050735
3. Filed a Patent on “An Advanced and Portable Women Safety Device”, Application Number: 202421050742

### B. Copyright:

1. **Title:** Early detection of Alzheimer’s disease through cognitive skill based gaming  
**Diary Number:** SW-14744/2021
2. **Title:** Digital Course File (DCF) – A Tool for the calculation of CO-PO Attainment  
**Diary Number:** 13246/2022-CO/SW
3. **Title:** Detection of counterfeit products using blockchain  
**Diary Number:** 7917/2022-CO/SW
4. **Title:** Development of A Web Based System Software For Measurement of Indirect PO Attainment through CO-PO Feedback  
**Diary Number:** SW-18488/2024
5. **Title:** E-Railway Concession System for College Students  
**Diary Number:** SW-18780/2024
6. **Title:** E-Bonafide System for College Students  
**Diary Number:** SW-18488/2024

**7. Title:** Solumind: Portal for Improving Mental Health

**Diary Number:** 7862/2024-CO/SW

**8. Title:** VeriFace: Unmasking Deep Fakes with the use of Deep Learning Techniques

**Diary Number:** 21847/2024-CO/SW

**9. Title:** StudyHub : Learning Platform Designed with AI Technology

**Diary Number:** 36769/2024-CO/SW

#### **Journal Publications & Conferences:**

##### **Journal:**

1. Tabassum Maktum, Namita Pulgam, Vaishnavi Chandgadkar, Prachi Pathak, Aditya Solanki, “A Machine Learning Based Framework for Bankruptcy Prediction in Corporate Finances Using Explainable AI Techniques”, Informatica, Vol 49, No 15 2025, <https://doi.org/10.31449/inf.v49i15.6745>.
2. Janak Ghansham Dhokrat, Namita Pulgam, Tabassum Maktum, Vanita Mane, “A Framework for Privacy-Preserving Multiparty Computation with Homomorphic Encryption and Zero-Knowledge Proofs”, Informatica, Vol 48, No 21, 2024, <https://doi.org/10.31449/inf.v48i21.6562>.
3. Namita D. Pulgam and Subhash K. Shinde, “Improving assaulted medical image quality using improved adaptive filtering network”, International Journal of Intelligent Systems Technologies and Applications.22, 1, pp no. 16–28, 2024. <https://doi.org/10.1504/ijista.2024.136531>.
4. Aditeya Varma, Anshul Rehpade, Riya Agarwal, Sakshi Kinikar, Namita D. Pulgam and Tabassum Maktum, “Detection of Diabetic Retinopathy using Swish Activation Function”, International Journal of Applied Engineering & Technology, vol. 5, no. 4, pp. 496-509, December 2023.

5. Kubal P., Mane V. & Pulgam, N., "Image Manipulation Detection Using ErrorLevel Analysis and Deep Learning", International Journal of Intelligent Systems and Applications in Engineering, 11(4), 91–99, 2023.
6. Namita D. Pulgam, Subhash K. Shinde, "Improving Quality of Watermarked Medical Images Using Symmetric Dilated Convolution Neural Networks", Journal of Telecommunications and Information Technology, 2023, 46–52.
7. Namita Pulgam, Subhash Shinde, "Robust Digital Watermarking using Pixel Color Correlation and Chaotic Encryption for Medical Image Protection", International Journal of Intelligent Systems and Applications in Engineering, Volume 10, Year 2022, Pages29-38.
8. "Image forgery detection and localization using modified JPEG ghost", International Journal of Innovative Technology and Exploring Engineering, Volume 8, Year 2019, Pages, 5433-5436.
9. Payal Sancheti, Rajashree Shedge Namita Pulgam, "Abstractive Summarization using AMR and Random Walk Algorithm", Grenze International Journal ofEngineering and Technology, Year 2018.
10. Yadav, Manish and Virkar, Harshit and Tipnis, Ishan and Gaikwad, Rohan and Pulgam, Namita and Nenwani, Kamlesh, "Result extraction from searchable PDF", International Journal of Advance Research, Ideas and Innovations in Technology, Year2018.
11. Mhatre, Ankit and Saha, Abhishek and Bhoir, Juilee and Tandel, Aishwarya and Pulgam, Namita and Nenwani, Kamlesh, "Interactive physiotherapy", International Journalof Advance Research, Ideas and Innovations in Technology, Year 2018.
12. Patil, Pooja and Pulgam, Namita and Mane Vanita, "Comparative Analysis of Feature Extraction Techniques in Keypoint based Image Forgery Detection.", Imperial journal of interdisciplinary research 3, 2017.
13. Namita Pulgam, Srijit Nair, Akshay Damodaran, Hrishikesh Balakrishnan, "A Survey on Run-time Information Gathering System", International Journal of Innovative Research in Computer and Communication Engineering, Year 2017.

14. Ashwini D. Gudewar (Namita Pulgam), Leena R. Ragha, "Ontology to Improve CBIR System", International Journal of Computer Applications, Volume 52, Year 2012.

### **Book Chapter:**

1. **Chapter Name:** "Comparative Analysis of Secure Multi-Party Techniques in the Cloud"  
**Book Name:** "Advanced Mathematics in Scientific Computing, Communication and Security" to be published by Scrivener-Wiley, USA.

### **Conference:**

1. Rohan Sagvekar, Anshul Rehpade, Vedangi Sawant and Namita D. Pulgam, "Gridwise: A Dynamic Dashboard for the Visualization and Monitoring of Renewable Energy Sources", International Conference on Human-Centric Smart Computing, ICHCSC'24, 2025.
2. Kane, A. N., Maktum, T., Mane, V. and Pulgam, N. (2025). IoT Based Automatic Women's Safety Device for Enhanced Personal Security. In Proceedings of the 1st International Conference on Cognitive & Cloud Computing - IC3Com; ISBN 978-989-758-739-9, SciTePress, pages 46-51. DOI: 10.5220/0013423600004646.
3. Tamboli, K., Mane, V., Pulgam, N. and Maktum, T. (2025). Study of IoT Layers Vulnerabilities and Attack Surfaces. In Proceedings of the 1st International Conference on Cognitive & Cloud Computing - IC3Com; ISBN 978-989-758-739-9, SciTePress, pages 76-84. DOI: 10.5220/0013264000004646.
4. N. Raut, B. Kalambe, A. Salvi, H. Kothari and N. Pulgam, "Soulmind: Mental Health Chatbot with Anxiety Prediction," 2024 2nd International Conference on Emerging Trends in Engineering and Medical Sciences (ICETEMS), Nagpur, India, 2024, pp. 75-81, doi: 10.1109/ICETEMS64039.2024.10965104.
5. J. Dhokrat, N. Pulgam, V. Mane and T. Maktum, "Analyzing RSA and Paillier Encryption Schemes: Secure Multiplication in Homomorphic Environments," 2024 International Conference on Computer, Electronics, Electrical Engineering & their Applications (IC2E3), Srinagar Garhwal, Uttarakhand, India, 2024, pp. 1-6, doi: 10.1109/IC2E362166.2024.10827028.
6. AbduRahim, Barna, R., Kulkarni, Y., Mydeen, J., D. Pulgam, N. (2024). VeriFace:

Deepfake Detector Using Deep Learning. In: Patil, M., Vyawahare, V., Birajdar, G. (eds) Intelligent Computing and Big Data Analytics. ICICBDA 2024. Communications in Computer and Information Science, vol 2234. Springer, Cham. [https://doi.org/10.1007/978-3-031-74682-6\\_24](https://doi.org/10.1007/978-3-031-74682-6_24).

7. Kamath, V., Chavan, I., Maurya, Y., Varma, A., Pulgam, N.D. (2024). Multi-modal Morse Code Translator. In: Patil, M., Vyawahare, V., Birajdar, G. (eds) Intelligent Computing and Big Data Analytics. ICICBDA 2024. Communications in Computer and Information Science, vol 2234. Springer, Cham. [https://doi.org/10.1007/978-3-031-74682-6\\_2](https://doi.org/10.1007/978-3-031-74682-6_2).
8. Z. Parkar, A. Nair, A. Nautiyal, R. Patil and N. Pulgam, "GestureX: Text Generation based on the Gesture Identified using LSTM," 2024 8th International Conference on Computing, Communication, Control and Automation (ICCUBEA), Pune, India, 2024, pp. 1-6, doi: 10.1109/ICCUBEA61740.2024.10775203.
9. H. Kothari, N. Raut, B. Kalambe, A. Salvi and N. Pulgam, "Visionize: Text To Image Generator," 2024 8th International Conference on Computing, Communication, Control and Automation (ICCUBEA), Pune, India, 2024, pp. 1-6, doi: 10.1109/ICCUBEA61740.2024.10774801.
10. A. N. Hande, S. M. Karn and N. Pulgam, "Recognition of Hand Signs for Hindi Language," 2024 Second International Conference on Advances in Information Technology (ICAIT), Chikkamagaluru, Karnataka, India, 2024, pp. 1-6, doi: 10.1109/ICAIT61638.2024.10690543.
11. Sagvekar, R., Sharma, B., Madurwar, R., Sawant, T., Pulgam, N. (2024). Vehicle Detection with Number Plate Recognition. In: Saha, A., Banerjee, S. (eds) Proceedings of the 2nd International Conference on Nonlinear Dynamics and Applications (ICNDA 2024), Volume 3. ICNDA 2024. Springer Proceedings in Physics, vol 314. Springer, Cham. [https://doi.org/10.1007/978-3-031-69146-1\\_19](https://doi.org/10.1007/978-3-031-69146-1_19).
12. Pathak, P., Chandgadkar, V., Solanki, A., Shrivastava, A., Pulgam, N., Maktum, T. (2024). Customer Churn Prediction and Personalised Recommendations in Banking. In: Manoharan, S., Tugui, A., Baig, Z. (eds) Proceedings of 4th International Conference on Artificial Intelligence and Smart Energy. ICAIS 2024. Information Systems Engineering and Management, vol 4. Springer, Cham, 2024. [https://doi.org/10.1007/978-3-031-61475-0\\_32](https://doi.org/10.1007/978-3-031-61475-0_32).
13. Prachi Pathak, Vaishnavi Chandgadkar, Aditya Solanki, Aryansh Shrivastava, Tabassum Maktum and Namita Pulgam, An Approach to Predict Breast Cancer using Ensemble



Learning Technique, 6th International Conference on Information Systems and Management Science (ISMS-2023), OP Jindal University, Raigarh, December 23-24, 2023.

14. S. S. Satam, A. A. Patil, D. B. Narkhede, S. Singh and N. Pulgam, "Zero-Day Attack Detection and Prevention," 2023 7th International Conference On Computing, Communication, Control And Automation (ICCUBEA), Pune, India, 2023, pp. 1-6, doi: 10.1109/ICCUBEA58933.2023.10392272.
15. K. S. Poddar, A. B. Jadhav, H. C. More, N. V. Kundar and N. Pulgam, "GesturePitch: A Smart Presentation System Utilizing Hand Gestures," 2023 7th International Conference On Computing, Communication, Control And Automation (ICCUBEA), Pune, India, 2023, pp. 1-5, doi: 10.1109/ICCUBEA58933.2023.10392211.
16. H. V. Vhatkar, H. G. Singh, A. S. Sonavane, S. Singh and N. Pulgam, "Crowdfunding using Blockchain," 2023 11th International Conference on Emerging Trends in Engineering & Technology - Signal and Information Processing (ICETET - SIP), Nagpur, India, 2023, pp. 1-6, doi: 10.1109/ICETET-SIP58143.2023.10151618.
17. Bhavesh Sharma, Rohan Sagvekar, Rushikesh Shinde, Jaskaran Singh Chawla, Namita D. Pulgam, "Price Forecast System for Crops Using Machine Learning", Fourteenth International Conference on Advances in Communication, Network, and Computing, Bengaluru, 2023.
18. P. Kubal, N. Pulgam and V. Mane, "Identifying Image Modifications using DCT and JPEG Quantization Technique," 2023 IEEE 8th International Conference for Convergence in Technology (I2CT), Lonavla, India, 2023, pp. 1-5, doi: 10.1109/I2CT57861.2023.10126200.
19. "Analysis of Different Encryption Techniques used in Watermarking Algorithm for the Security of Medical Image", International Conference on Emerging Trends in Engineering and Technology, ICETET, Volume 2022-April, Year 2022.
20. "Analysis and Simulation of Kali Linux Digital Forensic Tools", Dimple Santoshi, Namita Pulgam, Vanita Mane, SSRN 4111750, Year 2022.
21. "Detection of Counterfeit Products using Blockchain", Kunal Wasnik, Isha Sondawle, Rushikesh Wani, Namita Pulgam, ITM Web of Conferences, Volume ,2022.

22. “Image Authentication Using Watermarking Approach”, Shreeya Naik, Sampada Sherlekar, Heena Singh, Namita Pulgam, Proceedings of the 2022 3rd International Conference on Intelligent Computing, Instrumentation and, Control Technologies: Computational Intelligence for Smart Systems, ICICICT 2022, Pages 1186-1193.
23. “Advanced Approach for Heart Disease Diagnosis with Grey Wolf optimization and Deep Learning Techniques”, Dimple Santoshi, Sangita Chaudhari, Namita Pulgam, Data Intelligence and Cognitive Informatics. Algorithms for Intelligent Systems. Springer, Singapore, Year 2022.
24. “Sign language converter using hand gestures”, Shagun Gupta Department of Computer Engineering, Ramrao Adik Institute of Technology, Navi Mumbai, Maharashtra, India, Riya Thakur, Vinay Maheshwari, Namita Pulgam, Proceedings of the 3rd International Conference on Intelligent Sustainable Systems, ICISS 2020, Volume, Year 2020, Pages 251-256.
25. “Inter Frame Video Forgery Detection using Normalized Multi Scale One Level Subtraction”, Parmani, Rahul and Butala, Soham and Khanvilkar, Aakash and Pawar, Sachin and Pulgam, Namita, Parmani, Proceedings of International Conference on Communication and Information Processing (ICCIP) 2019.
26. “Kinect: From Gaming To Measuring Improvements In Physical Therapy”, Akshay Pakhle, Ashvin Khairnar, Animesh Barmukh, Namita Pulgam, Mohammed Waqar Ali, Year 2019.
27. “Word-IPCA: An Improvement in Dimension Reduction Techniques”, Sancheti, Payal and Shedge, Rajashree and Pulgam, Namita 2018 International Conference on Control, Power, Communication and Computing Technologies, ICCPCCT 2018, Volume, Year 2018, Pages 575-578.

#### **Project Competitions:**

- ☐ Mentor the students for project development to participate in Tiaa Retirement AI Hackathon, June 2024, Mumbai and team got selected in top 7.
- ☐ Mentor the students for project development to participate in ACM Kleos, June 2024,

Mumbai and team got selected in top 50s.

- ☐ Mentor the students for project development to participate in Techathon, Feb 2024, Pune and team got selected in top 30s out of 200 teams.
- ☐ Mentor the students for project development to participate in Hackthisfall Feb 2024, Gujrat and team got award for Best Idea Addressing Global Problem.
- ☐ Mentor the students for project development to participate in Geek for Geeks Solving for India Hackathon, May 2023 and one team is qualified at institute level and was finalist at zonal level.
- ☐ Mentor the students for preparing exhibits and developing working innovation model, who have participated in CiiA-2 Innovation Exhibition & Competition, Feb 2023 and two teams got selected in top 100 projects.
- ☐ Mentor the students for project development, who have participated in Anveshan: West Zone Research Convention-2023 and team was finalist at zonal level.
- ☐ Mentor the students for project development, who have participated in Smart India Hackathon 2022 and the team was selected as finalist at national level.
- ☐ Mentor the students for project development, who have participated in Aavishkar Competition conducted by University of Mumbai 2021 and the team was selected as finalist at zonal level.
- ☐ Mentor the students for project development, who have participated in Aavishkar Competition conducted by University of Mumbai 2017 and the team was selected as finalist at zonal level.