

CURRICULUM VITAE

Name	PAYAL BOSE	
Qualification	<ol style="list-style-type: none">1. PHD (Awarded 2024)2. MTECH (2018)3. BTECH (2016)4. BSc (Physics Hons) (2013)5. Higher Secondary (2009)6. Secondary (2007)	
Designation, Department and School	<ol style="list-style-type: none">1. Assistant Professor (Computer Science and Engineering) (from 2024)2. Consultant System Engineer (Quantum Engg. PVT LTD.) (from 2018 – 2023)	
Subject teach	<ol style="list-style-type: none">1. Programming for Problem Solving2. Digital Image Processing3. Computer Vision4. Computer Graphics5. Data Structure and Algorithm	
Research Interest	Imaging System, Medical Imaging, Pattern Recognition, Computer Vision, Affective Computing, Computational Intelligence	
Experience	<ol style="list-style-type: none">1. In academic 1+ year2. In industry 5 years3. In Research 7+ years	
Publications	<ul style="list-style-type: none">• Conference:<ol style="list-style-type: none">1. Payal Bose, Samir K. Bandyopadhyay (2022). Human Motion Detection and Recognition from Video Surveillance Based on Machine Learning Approaches. In: Zhang YD., Senjyu T., So-In C., Joshi A. (eds) Smart Trends in Computing and Communications. Lecture Notes in Networks and Systems, vol 286. Springer, Singapore. https://doi.org/10.1007/978-981-16-4016-2_512. Payal Bose, Samir K. Bandyopadhyay, Amiya Bhaumik, Sandeep Poddar (2022). An Application for Facial Image Beautification. In: Hu, YC., Tiwari, S., Trivedi, M.C., Mishra, K.K. (eds) Ambient Communications and Computer Systems. Lecture Notes in Networks and Systems, vol 356. Springer, Singapore. https://doi.org/10.1007/978-981-16-7952-0_12	

3. Payal Bose, Shawni Dutta, Vishal Goyal, Samir K. Bandyopadhyay (2023). A Graphical-Based Video Steganography for Information Security. In: Kaiser, M.S., Xie, J., Rathore, V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2021). Lecture Notes in Networks and Systems, vol 401. Springer, Singapore. https://doi.org/10.1007/978-981-19-0098-3_52
4. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay, Midhunchakkaravarthy Janarthanan (2023). A Novel SARS-COV-2 Variant Omicron Disseminating Evaluation. In: Reddy, A.B., Nagini, S., Balas, V.E., Raju, K.S. (eds) Proceedings of Third International Conference on Advances in Computer Engineering and Communication Systems. Lecture Notes in Networks and Systems, vol 612. Springer, Singapore. https://doi.org/10.1007/978-981-19-9228-5_5
5. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay, Midhunchakkaravarthy Janarthanan (2023). An Intelligent Approach for Investigating Water Quality Using Machine Learning Models. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of Third Emerging Trends and Technologies on Intelligent Systems. ETTIS 2023. Lecture Notes in Networks and Systems, vol 730. Springer, Singapore. https://doi.org/10.1007/978-981-99-3963-3_5
6. Shawni Dutta, Payal Bose, & Digvijay Pandey. (2024). Exploring entrepreneurial mindset among university students using machine learning approaches. In Artificial Intelligence and Information Technologies (pp. 397-403). CRC Press.
7. Shawni Dutta, Samir Kumar Bandyopadhyay, Midhunchakkaravarthy Janarthanan, Payal Bose (2024). A Predictive Modeling to Assess the Underlying Risks of Stroke. In: Marriwala, N.K., Dhingra, S., Jain, S., Kumar, D. (eds) Mobile Radio Communications and 5G Networks. MRCN 2023. Lecture Notes in Networks and Systems, vol 915. Springer, Singapore. https://doi.org/10.1007/978-981-97-0700-3_50

- **Book Chapter:**

1. Shawni Dutta, Payal Bose, Samir K Bandyopadhyay (2021). Bank Term Deposit Subscription Recommendation Using Cross-validated Neural Network. New Innovations in Economics, Business and Management, Vol. 2, DOI: 10.9734/bpi/niebmv2/2596E

• **Research Article:**

1. Payal Bose, Samir K Bandyopadhyay (2017). Object Detection, Extraction and Classification using Image Processing Technique. Journal for Research.
2. Payal Bose, Samir K Bandyopadhyay (2018). Identification of the Important Persons with Gender from Video Images. International Journal of Scientific Research in Computer Science, Engineering and Information Technology.
3. Payal Bose, Samir K Bandyopadhyay (2018). Identification of Important Person Press Note along with Parts of Speech in the Note. International Journal of Trend in Research and Development.
4. Payal Bose, Samir K Bandyopadhyay (2020). Human Face and Facial Parts Detection using Template Matching Technique. International Journal of Engineering and Advanced Technology.
5. Payal Bose, Samir K Bandyopadhyay (2020). Facial Spots Detection Using Convolution Neural Network. Asian Journal of Research in Computer Science.
6. Payal Bose, Samir K Bandyopadhyay (2020). A Method for Identification of Face of the Person and Presence of Facial Spot in the Face. International Journal for Research in Applied Sciences and Biotechnology.
7. Payal Bose, Samir K Bandyopadhyay (2020). Human Face Detection: Manual vs. Kohonen Self Organizing Map. International Journal of Computer (IJC).
8. Payal Bose, Samir K Bandyopadhyay, & Vishal Goyal. (2020). Human Different Head Poses and Facial Expression Analysis using Principal Component Analysis. Xeno Journal of Biomedical Sciences.
9. Payal Bose, Samir K Bandyopadhyay (2021). A Proposed Method for Age Detection of Person Based on the size of Face to the size of the Eye of a Face Turkish Journal of Computer and Mathematics Education Research Article. Turkish Journal of Computer and Mathematics Education.
10. Shawni Dutta, Payal Bose, Vishal Goyal, & Samir K. Bandyopadhyay. (2021). Machine Learning Techniques and Syntactic Pattern Recognition based Heart Disease Prediction for Smart Health. International Journal of Medical Research & Health Sciences.

	<ol style="list-style-type: none"> 11. Payal Bose, Shawni Dutta, Vishal Goyal, & Samir K. Bandyopadhyay (2021). Leaf Diseases Detection of Medicinal Plants Based on Support Vector Machine Classification Algorithm. <i>Journal of Pharmaceutical Research International</i>. 12. Payal Bose, Shawni Dutta, Vishal Goyal, & Samir K. Bandyopadhyay (2021). Pharmacy Impact for Distinguishing Normal Face from Abnormal Face Due to COVID- 19. <i>Journal of Pharmaceutical Research International</i>. 13. Samir K. Bandyopadhyay, Payal Bose, Shawni Dutta (2021). A Vision for an Ideal World. <i>IOSR Journal of Humanities And Social Science (IOSR-JHSS)</i>. 14. Shawni Dutta, Payal Bose, Vishal Goyal, & Samir K. Bandyopadhyay. (2021). Applying Convolutional-GRU for Term Deposit Likelihood Prediction. <i>International Journal of Engineering and Management Research</i>. 15. Kshitij Miraj Shah, Payal Bose, & Samir K. Bandyopadhyay (2021). DETECTION OF GLAUCOMA AND DIABETES THROUGH IMAGE PROCESSING. <i>WORLD JOURNAL OF PHARMACEUTICAL AND MACHINE LEARNING APPROACHES</i>. 16. Payal Bose, Shawni Dutta, Vishal Goyal, & Samir K. Bandyopadhyay (2021). Proposed Relationship between Task of Operating System and the Vaccination Process for Covid-19. <i>Drugs and Cell Therapies in Hematology</i>. 17. Payal Bose, Shawni Dutta, Vishal Goyal, & Samir K. Bandyopadhyay (2021). Machine Learning Techniques and Syntactic Pattern Recognition based Heart Disease Prediction for Smart Health. <i>International Journal of Medical Research & Health Sciences</i>. 18. Payal Bose, Samir Kumar Bandyopadhyay, Amiya Bhaumik, Sandeep Poddar (2022). Female Diabetic Prediction in India Using Different Learning Algorithms. <i>Universal Journal of Public Health</i>. 19. Payal Bose, Samir Kumar Bandyopadhyay, Amiya Bhaumik, Sandeep Poddar (2022). Machine Learning and Deep Learning Integration for Skin Diseases Prediction. <i>International Journal of Engineering Trends and Technology</i>. 20. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay, Midhunchakkaravarthy Janarthanam (2022). A Hybrid Machine Learning Model for Bank
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	<p>Customer Churn Prediction. International Journal of Engineering Trends and Technology.</p> <p>21. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay (2023). Forecasting Health Insurance Premium Using Machine Learning Approaches. Asia-Pacific Journal of Science and Technology.</p> <p>22. Payal Bose, Samir Kumar Bandyopadhyay (2024). A Comprehensive Assessment and Classification of Acute Lymphocytic Leukemia. <i>Mathematical and Computational Applications</i>, 29(3), 45.</p> <p>23. Sanjay Nag, Nabanita Basu, Payal Bose, and Samir Kumar Bandyopadhyay. 2024. A Novel Grammar-Based Approach for Patients' Symptom and Disease Diagnosis Information Dissemination to Maintain Confidentiality and Information Integrity, <i>Bioengineering</i>.</p>
Academic Awards	<ol style="list-style-type: none"> 1. University of Calcutta 5th rank holder in MTech, Dept. of Computer Science and Engineering, 2018. 2. Awarded InRes Young Scientist Award 2021 from Institute of Researchers (InRes). The Institute of Researchers, registered and recognized by the Ministry of MSME, Govt. of India, and a premier organization in India to promote and support research.
Journal Reviewer	<p>SN Computer Science (Spriger, SCI, Scopus), International Journal of Electrical and Computer Engineering (IJECE) [Scopus], Advances in Astronautics Science and Technology [Springer, Scopus], Conference RAAISA (2023, 2024)</p>
Other salient features	<ol style="list-style-type: none"> 1. Presented 10 International Conferences 2. Received two Best Conference Presentation Certificate (2023).
Symposium/Workshop/Conference/Seminar/Webinar	NA
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