Dr. Shiny Duela J, M.E., Ph.D.,

Associate Professor,

Department of CSE, CET, SRMIST,

Ramapuram Campus, Chennai.

Mail id: shinyduj@srmist.edu.in



**Dr. Shiny Duela J** is working as an Associate Professor in the Department of CSE at SRMIST, Ramapuram campus. She holds a Ph. D degree in the field of Cloud Data Security from Anna University in 2018. She has 15 years of teaching experience with good programming skills. She is a recognized supervisor under SRMIST and guiding 5 scholars at present. She is certified in various courses from Coursera,ICT Academy and NPTEL. She has published articles in National and International Journals, Conferences and symposiums. She is serving as Doctoral Committee Member for Scholars under Anna University, Karunya University and Sathyabama University. She has authored textbooks and book chapters. She has submitted Funded Project Proposals to DST, SERB, TNSCST, ISRO and MEITY. She is a professional member of IEEE, ACM, ISTE, IAENG, Internet Society. She is acting as reviewer for journals like Journal of Super Computing, Wireless Personal communication, Artificial Intelligence in Agriculture, Advances in Science, Technology and Engineering Systems Journal. She has filed and published patents and has one international copyright. She is the Board of Studies member at Sri Sairam Engineering college and Annapoorana Engineering college.

### AREA OF RESEARCH:

Cyber Security, Data Mining, Distributed Systems

### **SELECTED PUBLICATIONS:**

- 1. Shiny Duela J., Umamagerswari. A, Prabavathi. R, P. Umapathy and Raja. K, "Quantum assisted Genetic Algorithm for Sequencing Compatible Amino Acids in Drug Design," 2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), Bhilai, India, 2023, pp. 1-7, doi: 10.1109/ICAECT57570.2023.10117673.
- 2. S. Patel, K. Raja, J. S. Duela, T. M. Chen and M. Sathiyanarayanan, "Identifying Cyber Extremism Sentiments using ROBERTA," 2023 International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE), Bengaluru, India, 2023, pp. 191-196, doi: 10.1109/IITCEE57236.2023.10090910.
- **3.** Shilpa Biradar, J. Shiny Duela, P. Ramya, Flory Francis, Tarun Singhal, Ankur Singhal, Ranjan Mishra, R. Govindaraj, Amare Kebede Asfaw, "Improved Channel Capacity in 5G Ultradense Network", Wireless Communications and Mobile Computing, vol. 2022, Article ID 7948395, 9 pages, 2022. https://doi.org/10.1155/2022/7948395
- **4.** Duela, S., Sara, D. & Prabavathi, (2022). Bin Bay: An Optimized Smart Waste Disposal System for a Sustainable Urban Life using LSTM and Fog Computing. Journal of Computer Science, 18(11), 1110-1120. https://doi.org/10.3844/jcssp.2022.1110.1120
- **5.** Arasakumaran, U., Johnson, Shiny Duela., Sara, D., Kothandaraman, R. (2022). An enhanced identification and classification algorithm for plant leaf diseases based on deep learning. Traitement du Signal, Vol. 39, No. 3, pp. 1013-1018. https://doi.org/10.18280/ts.390328
- **6.** A. G. E. Thomas and J. S. Duela, "A Comparative and Extensive Study of Covid 19 Diagnosis using Lung Ultrasound Images," 2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC), Salem, India, 2022, pp. 1056-1063, doi: 10.1109/ICAAIC53929.2022.9793247.
- 7. Raja, K., Duela, S. J., Kundra, I., Bhatt, P., & Kagot, A. (2022). AI to automate brain tumor classification using visual geometric group (VGG) 16. International Journal of Health Sciences, 6(S3), 3889–3901. https://doi.org/10.53730/ijhs.v6nS3.6648
- **8.** K. Raja, J. S. Duela, K. Duraipandian, S. Rajan and M. Sathiyanarayanan, "VIRAL: The Effectiveness of Virtual Lab Teaching in Developing Higher Order Thinking Skills," 2021 1st

- Conference on Online Teaching for Mobile Education (OT4ME), Alcalá de Henares, Spain, 2021, pp. 116-117, doi: 10.1109/OT4ME53559.2021.9638861.
- 9. J. Shiny Duela, S.Sridevi, R.Prabavathi 2021, "A Novel Approach to Detect the Bearing Fault in Rail Networks Using Big Data Classification and Delivery through Edge Processing", Design Engineering, Issue. 7, Pp. 12577 12596, Scopus.
- **10.** Pola Ashritha, M Banusri, R Namitha, J. Shiny Duela 2021"Effective fault detection approach for cloud computing", Journal of Physics: Conference Series, doi:10.1088/1742-6596/1979/1/012061, Scopus.
- 11. R. Prabavathi, J. Shiny Duela, Mr. S.Senthil Pandi, Ms.Saranya 2021, "A Dynamic and Unique Approach for Energy Consumption Prediction In High Raised Buildings", Turkish Online Journal of Qualitative Inquiry, Vol. 12, Issue 5, pp:1247–1256, Scopus.
- 12. R.Prabavathi, J.Shiny Duela, V.Brindha Devi, S.SenthilPandi 2021,"Prehistoric Stone Image Tamil Character Recognition using Optimized Deep Neural Network using Zernike Moments and Simplex Method", Turkish Journal of Computer and Mathematics Education Vol.12 No.11,pp:5983-5591, Scopus.
- **13.** S. Sridevi, J.Shiny Duela 2021,"A Comprehensive Study on EEG Signal Processing Methods, Challenges and Applications ",IT in Industry, Vol. 9, No.3,pp:599-607,WoS.
- **14.** Shiny Duela J, B Kedarnath, B Ramanuja Charya, Y V Avinash 2021,"Anticipation of DDoS Assault pattern using Deep Learning",Annals of Romanian society for Cell biology,Vol.25 Issue:5, pp:5276 5290,Scopus.
- **15.** J. Shiny Duela, S. Nishanth, K. Vishwa Dev, D. Sujai 2021,"Secure Covid-19 Vaccine Supply Supervision System Using Blockchain", in the Journal Paideuma Journal of Research, Vol XIV Issue 5, pp:99-110, WoS.
- **16.** Dioline Sara, Shiny Duela J 2021,"Hyperspectral and multispectral image fusion techniques for high resolution applications: a review" in the journal Earth Science Informatics, Springer, https://doi.org/10.1007/s12145-021-00621-6,SCI Indexed
- 17. Senthilselvi A, Shiny Duela J, Prabavathi R, Dioline Sara 2021,"Performance Evaluation of Adaptive Neuro Fuzzy System (ANFIS) over Fuzzy Inference System (FIS) with Optimization Algorithm in De-noising of Images from salt and pepper noise" in the journal Advanced Intelligence and Humanized Computing, Springer, https://doi.org/10.1007/s12652-021-03024-z,SCI Indexed
- **18.** M.Roshni Thanka, Bijolin Edwin, J.Shiny Duela, V Ebenezer 2020, "Automated Diagnosis of Skin Disease Multi-Class Image Classification Using Deep Convolution Neural Network" in the Journal of Green Engineering, Volume-10, Issue-10,pp: 7646-7660, Scopus.
- 19. J Shiny Duela, T.Illakiya, Dioline Sara 2020 "Smart Water Leakage Prevention System Using Wireless Sensors" in the Journal of Green Engineering, Volume-10, Issue-7,pp: 3768–3787, Scopus.
- **20.** J Shiny Duela, K.Raghavender, N.Viswanath, G.KiranSiddarth 2020,published a paper title "A Cohesive Scheme of Exploration-Based Air Quality Prediction" in the Journal of Green Engineering, Volume-10, Issue-4,pp:1533-1548, Scopus.
- **21.** J.Shiny Duela, M.Roshni Thanka, Bijolin Edwin 2019,"Improving the Reliability of Web Based Result Query Systems during High Traffic Periods",International Journal of Recent Technology and Engineering (IJRTE), Volume-8 Issue-5S5,Pp:174-180, Scopus.
- **22.** Juliet Rani Rajan, Dr.A.Chilambu Chelvan, Dr.J.Shiny Duela 2019, "Multi-Class Neural Networks to Predict Lung Cancer", Journal of Medical Systems, 43:211, DOI: 10.1007/s10916-019-1355-9, Springer, SCI Indexed.
- **23.** E.Bijolin Edwin, M.Roshni Thanka & J.Shiny Duela 2019, 'An Internet of Drone (IOD) Based Data Analytics in Cloud for Emergency Services', International Journal of Recent Technology and Engineering (IJRTE), Volume-7 Issue-5S2,Pp:263-267, Scopus.
- **24.** Shiny Duela, J & Uma Maheswari, P 2018, 'Mitigation of DDOS Threat to Service Attainability in Cloud Premises', International Journal of Reasoning-based Intelligent Systems, Vol.10,No.3/4,pp.337-346, Scopus.
- **25.** Shiny Duela, J & Uma Maheswari, P 2017, 'Ensuring Data Security in Cloud Environment through Availability', Journal of Computational and Theoretical Nanoscience, Vol.14, No.9, Pp.4454-4463, Scopus.

### **BOOK CHAPTER:**

- **1.** Shiny Duela, J., Raja, K., Umapathy, P., Rangnani, R., Patel, A. (2023). Decentralized Payment Architecture for E-Commerce and Utility Transactions with Government Verified Identities. In: Reddy, V.S., Prasad, V.K., Wang, J., Reddy, K.T.V. (eds) Soft Computing and Signal Processing. ICSCSP 2022. Smart Innovation, Systems and Technologies, vol 313. Springer, Singapore. https://doi.org/10.1007/978-981-19-8669-7 2
- **2.** J. Shiny Duela, A. Umamageswari, K. Raja, S. Suresh 2023, "Efficacy of V-Lab for Engineering Students during COVID-19", for the book titled Redefining Virtual Teaching Learning Pedagogy, Publisher: Scrivener, JOHN WILEY, Print ISBN:9781119867586 | Online ISBN:9781119867647
- **3.** J.Shiny Duela, Illakiya T 2021, "Automated Diagnosis of Covid-19 using Reinforced Lung Segmentation and Classification Model", for the book titled Machine Learning for Healthcare Applications, Publisher: Scrivener, JOHN WILEY.

### **BOOK PUBLISHED:**

- **1.** Dr.Faritha Banu, Dr.Umamageswari A, Dr.Deepa S, Dr.J.Shiny Duela, 2023, published a book titled "Object Oriented Design and Programming", Publisher: Iterative International Publishers, ISBN-13: 978-1685764081.
- **2.** Dr.A. Senthilselvi, Dr.J.Shiny Duela, 2020, published a book titled "Artificial Intelligence", Publisher: FORSCHUNG PUBLICATIONS,ISBN No: 978-93-87865-40-2

#### **PATENTS:**

- 1.Recognition of cyber-bullying on social media using (ML) machine learning approach.202341002315 A, Publication Date: 17/02/2023
- 2. Bluetooth Based Communication Control Device For Electro-Mechanical Appliances. 377408-001, Publication Date: 16/03/2023
- **3.** IOT, AI, ML Based Paddy-Disease Prevention System Using (Dnn) Deep-Neural-Networks And Image- Processing, 202241006977 A, Publication Date:04/03/2022
- **4.** Staggered Short Transmission (SST) protocol for routing during energy saving through WSN. 2020103027, Publication Date:27/10/2020.

### INTERNATIONAL COPYRIGHT:

1. K. Raja, J. Shiny Duela, Kavitha Duraipandian, Sushila Rajan, and Mithileysh Sathiyanarayanan, "Virtual Innovation & Research Acceleration Lab (VIRAL)", International Copyrights, October 2022, Copyrights Number - 18784301022S040.

#### **PROFESSIONAL BODIES:**

- 1. Association for Computing Machinery (ACM)-Member No.: 2720880
- 2. Institute of Electrical and Electronics Engineers(IEEE)-Member No.: 97011166
- 3. International Association of Engineers (IAENG)-Member No.: 170362
- 4. International Computer Science and Engineering Society (ICSES)-Member No.: 8239
- 5. Internet Society

## Google Scholar:

https://scholar.google.com/citations?user=ptAd6xsAAAAJ&hl=en&authuser=2

### LinkedIn:

https://www.linkedin.com/in/dr-j-shiny-duela-204b1b61/

### **ORCID:**

https://orcid.org/0000-0002-3989-9194

# Web of Science:

https://www.webofscience.com/wos/author/record/ABD-7672-2020

### **Scopus Link:**

https://www.scopus.com/authid/detail.uri?authorId=56565565600