

# **R.ANGELINE**

## ASSISTANT PROFESSOR

Area: Computer Vison Affiliation: Department of Computer Science Engineering, Ramapuram Campus, SRM Institute of Science and Technology (formerly known as SRM University)

### Education

Ph.D (Pursuing)		SRMIST
M.Tech	IT	Sathyabama University, 2008
B.E	IT	P.R.Engineering College, Bharathidasan University

### Subjects Handled:

- Computer Networks
- Compiler Design
- Theory of Computation
- Cloud computing
- Object Oriented Programming
- Artificial Intelligence
- Microprocessor and Microcontroller
- Information Storage and Management
- Programming for Problem Solving

#### **Research Interests**

- Deep Learning
- Machine Learning
- Computer Vision

#### **Selected Publications:**

- D. Deva Hema, R. Angeline, "Frequency of buses determination model and bus schedule in Chennai metro transport for ITS based system" in International Journal of Emerging Technology and Advanced Engineering in Volume 4,Issue 11,June 2014
- A.Anitha, R. Angeline, "A Supervised Web-Scale Forum Crawler Using URL Type Recognition" in International Journal of Emerging Technology and Research-IJETR, Volume-1, Issue-4, May-June, 2014. Paper ID : IJTERV114180
- R. Angeline, J. Caroline El Fiorenza, D.Devahema, "An Analysis of Security issues and Challenges in Cloud Computing" in International Journal of Advanced Research Trends in Engineering and Technology(IJARTET), Volume-3, Special Issue-2, March 2016
- Sakshi Malhotra, Kriti Sinha, Prashant Godara, S.Preethi, R.Angeline, "Airport Baggage Handling Using RFID and Cloud Technology" in International Journal of Emerging Technologies in Engineering Research(IJETER), Volume – 6, Issue-4, April(2018)
- R. Angeline , Aditya Sharma , Ahitagnee Paul , Saurav Sanyal, "RFID based ADHAAR card" in International Journal of Computer Trends and Technology(IJCTT), Volume-59, Issue-1, April(2018)
- R. Angeline, Kavithajen. K, Toshita Balaji, Venugopal Balaji, Malavika Saji, "Automated Attendance System Using Facial Recognition" in International Journal of Engineering and Techniques –IJET, Volume-4, Issue-2, 2018, Paper ID:IJET-V4I2P96

- R.Angeline, Paruchuri Yaswanth, L. Ali Khan, Sk. Ashar, P.Santhosh "Data Leakage Detection" in International Research Journal in Advanced Engineering and Technology(IRJAET) in the volume-4, Issue-2, 2018
- Mrs. R. Angeline, Swastika, Shreya Kuna, Rachana Tanneeru "Defense Attack: Gesture Recognition Smart Watch" in International Journal of Advance Research And Innovative Ideas In Education (IJARIIE) in the volume-4, Issue-5, 2018
- S.Mary Shalin Benigna, Hakshatha Devi, Sanjay Ravichandran, R.Angeline "Voice Controlled Home Automation System" in Journal of Network Communications and Emerging Technologies (JNCET), Volume-8, Issue-4, April(2018)
- 10. R. Angeline, Preethi. M, Haripriyaa Shri S.D, Aakhya Singh, "Vision Esartz for the Visually Challenged" in Journal of Network Communications and Emerging Technologies (JNCET), Volume-8, Issue-4, April(2018)
- 11. Angeline R., Siddharth Shankar Sharma., Sanjeev Mudaliar R., Rupam Halder and Vishal Gupta, "Hybrid Engine: A major step towards environment protection" in International Journal of Recent Scientific Research(IJRSR), Volume-9, Issue-9(E), September 2018, pp.28965-28969.
- 12. R.Angeline, B.Gokul, B.Prashanth, P.Hareesh, Animesh Singh "Monitoring and Controlling of Street Lamp using GSM Technology" in International Research Journal of Engineering and technology(IRJET), Volume-5, Issue-10, October 2018.
- R. Angeline, YashKetan Patra, Karthik Kembai, Sangram Mandal, "Smart Fridge

   A 24/7 Grocery Reminder" in International Research Journal of Engineering
   and technology(IRJET), Volume-5, Issue-10, October 2018.
- 14. Angeline, R. and . P, Sahitya and . S, Swathi and . T. S, Chethan and . L, Shivani,
  "Temperature Control System for Range Optimization in Electric Vehicle" (September 12, 2019). International Journal of Mechanical Engineering and Technology, 10(3), 2019, pp. 1117-1126, Available at SSRN: https://ssrn.com/abstract=3452601.

- 15. Published the paper titled "**A novel analysis and modelling of ride-sharing services in real time**" in International Journal of Recent Technology and Engineering (IJRTE), April 2019.
- 16. R.Angeline, Kavithvajen.K, Toshita Balaji, Malavika Saji, Sushmitha.S.R, "CNN integrated with HOG for efficient Face Recognition" in International Journal of Recent Technology and Engineering(IJRTE), April 2019.
- 17. R.Angeline, S.S.Narayanan, Paruchuri Yaswanth, Ponna Darshan, "**Prediction** of rail wheel deformity using rail asset monitoring and predictive maintenance" in Journal of Advanced Research in Dynamical and Control Systems(JARDCS), May 2019.
- 18. Nisitaa Karen, Anuja TR, Amirtha P, R. Angeline, "Physiological Stress Prediction using Machine Learning Classifiers" in International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-10, Issue-10, July 2019.
- 19. R Mario Vishal, Deekshith Maram, P Krishna Chaitanya, R Angeline, "Object Detection: Automatic License Plate Detection using Deep Learning and OpenCV" in International Journal of Engineering and advanced technology (IJEAT), Volume-9, Issue-1, Ocotber 2019, Page No. 6022-6028
- 20. Neha Gupta, Anirudh Madhavan, Divya Duvvuri, R. Angeline, "MBTI Based Personality Prediction of a User Based on their Writing on Social Media " in International Journal of Engineering and advanced technology(IJEAT), Volume-9, Issue-1, Ocotber 2019, Page No. 3372-3376.
- 21. Angeline R, Riddhi Dutta, Rajesh Kumar Yadav, Mohit Sharma, "Password Authentication System using Coordinates and Location" in International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9, Issue-1, November 2019.
- 22. Angeline R, Rudra Dev Mishra, Lingaraj Gopalakrishnan, Saravanan B, "An GPS Based Online Blood Bank Management System using Database Management System" in International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9, Issue-1, November 2019.

- 23. Aditya Dutta, Rohan Varghese Mathew, Sourav Rajeev, R. Angeline. (2020). **"Data Integrity and Privacy Preserving Framework using Blockchain and Edge Computing**". International Journal of Advanced Science and Technology, 29(10s), 7340-7348. Retrieved from http://sersc.org/journals/index.php/IJAST/article/view/23692
- 24. R Angeline, Ruthuparan Prasad, M Chandrakanth, Rishipal Singh Rathore. (2020).
   "CNN-LSTM Based Algorithm to Detect and Counter Malicious URLs". International Journal of Advanced Science and Technology, 29(10s), 6864-6871. Retrieved from http://sersc.org/journals/index.php/IJAST/article/view/23584
- 25. Angeline R., Mrithika M., Raman A., Warrier P. (2020) "Pneumonia Detection and Classification Using Chest X-Ray Images with Convolutional Neural Network". In: Smys S., Iliyasu A.M., Bestak R., Shi F. (eds) New Trends in Computational Vision and Bio-inspired Computing. ICCVBIC 2018. Springer, Cham. https://doi.org/10.1007/978-3-030-41862-5\_69
- 26. D.Subitha, R.Vani, R.Angeline (2020) "Automation of Transportation Process using IoT for Enhanced Production", Journal of Green Engineering, Volume-10, Issue-11,November 2020, 1031-11039 Retrieved from http://www.jgenng.com/volume10-issue11.php
- 27. "ResNet:A convolutional Neural Network for detecting and diagnosing of coronavirus pneumonia", R. Angeline and R. Vani Published under licence by IOP Publishing Ltd, IOP Conference Series: Materials Science and Engineering, Volume 1084, First International Conference on Circuits, Signals, Systems and Securities (ICCSSS 2020) 11th-12th December 2020, Tamil Nadu, India, Citation R. Angeline and R. Vani 2021 *IOP Conf. Ser.: Mater. Sci. Eng.* 1084 012011
- 28. Angeline. R, Alice Nithya A, A Review on Multimodal Online Educational Engagement Detection System Using Facial Expression, Eye Movement and Speech Recognition, Turkish Journal of Computer and Mathematics Education (TURCOMAT), Vol.12No.9(2021), **DOI:** https://doi.org/10.17762/turcomat.v12i9.3 667
- 29. Angeline R, Surya T, Harie Krishnan G, Pranav R, Identifying Active Listeners in Online classes Using Face Recognition and Sentimental Analysis, ISSN NO : 0090-5674, Vol XIV Issue 5 2021, PAIDEUMA JOURNAL, Page No:91-98, DOI : 11.3991/Pjr.V14I5.86009
- 30. Angeline R., Vani R. (2021) Privacy Preserving System and Data Integrity Using Distributed Hash Table in Blockchain. In: Sharma T.K., Ahn C.W., Verma O.P., Panigrahi B.K. (eds) Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, vol 1381. Springer, Singapore. https://doi.org/10.1007/978-981-16-1696-9\_46

- Vani R, Angeline R, Robot with Dual-Axis Writing Control in Service of Disabled People, Pages 559-566, Advances in Mechanical Engineering, Select Proceedings of CAMSE 2020
- Angeline, R., Vani, R., Jeshron Sonali, A., Rao, D.A. (2022). Automated Detection of Cataract Using a Deep Learning Technique. In: Kumar, A., Zurada, J.M., Gunjan, V.K., Balasubramanian, R. (eds) Computational Intelligence in Machine Learning. Lecture Notes in Electrical Engineering, vol 834. Springer, Singapore. https://doi.org/10.1007/978-981-16-8484-5\_38
- 33. Angeline, R., Ashwin, B.A., Sri Krishna, S.P., Gokul, M.E. (2022). Localized Attention Network for Facial Expression Recognition in an Online Tutoring System. In: Goyal, V., Gupta, M., Mirjalili, S., Trivedi, A. (eds) Proceedings of International Conference on Communication and Artificial Intelligence. Lecture Notes in Networks and Systems, vol 435. Springer, Singapore. https://doi.org/10.1007/978-981-19-0976-4\_30
- 34. R. Angeline, Krishna Chaitanya Poladi, Rudra Dev Mishra; Leverage and discriminant analysis of face recognition. *AIP Conference Proceedings* 5 April 2022; 2405 (1): 020020. https://doi.org/10.1063/5.0072956
- 35. Angeline, R. and Alice, N.A., 2022. Multimodal Human Facial Emotion Recognition Using DenseNet-161 and Image Feature Stabilization Algorithm. Traitement du Signal, 39(6), p.2165.
- 36. Angeline, R. and Nithya, A.A., 2023, June. Recognizing active learners in online instruction using face recognition and sentimental analysis. In AIP Conference Proceedings (Vol. 2581, No. 1). AIP Publishing.
- 37. Angeline, R. and Nithya, A.A., 2023, June. A review on educational engagement recognition model based on multimodal features in online learning. In AIP Conference Proceedings (Vol. 2581, No. 1). AIP Publishing.

#### **Conferences:**

1. Published the paper title "IP Source Address Validation : Solution for IP

**Spoofing**" in National Conference on Intelligent Computing And

Communications- NCICC '14.

2. Presented the paper titled "A Supervised Web-Scale Forum Crawler Using

URL Type Recognition" in "National Conference on Computing and

Communication Engineering - NCCCE '14"

3. Presented the paper titled "A Supervised Web-Scale Forum Crawler Using

**URL Type Recognition**" in National Conference on Emerging Trends in Information and Communication Technology– ETICT '14.

4. Presented the paper titled "**A Supervised Web-Scale Forum Crawler Using URL Type Recognition**" in "International Conference on Architecture, Software Systems and Green Computing- ICASG" 2014

5.Presented the paper titled "Harmonizing Presentation, Exactness and Correctness For Protected Cloud Transaction" in "National Conference on Recent Research in Advanced Computing - NCRRAC '15"

6.Presented the paper titled **"Personalized Data Retrieval Using Mutual Information**" in National Conference on "Recent Trends in Efficiency Management in Industries" 2015

7.Presented the paper titled **"Dynamic Pseudonymous Spatial Query Processing for Enhancing Efficiency and Privacy in Road Network**" in International Conference on "Advances in Computing and Wireless Technologies – ICACWT '16".

8.Presented the paper titled "**Optimized Selection Of Dynamic Cluster Heads Using Redundant**" in an International conference on recent trends in computing technology conducted by Bharath University on 21<sup>st</sup> April 2017.

9.Presented the paper titled "**Brain Computer Interface**" in the International Conference on Communication and Electronics Systems (ICCES 2018) organized by PPG Institute of Technology, during 15-16, October 2018, Coimbatore.

10.Presented the paper titled **"An Immortal Database System for the Decentralized Internet**" in the International Conference on Communication and Electronics Systems (ICCES 2018) organized by PPG Institute of Technology, during 15-16, October 2018, Coimbatore.

11.Presented the paper titled "**Secure Transmission using Holographic Handshaking**" in International Conference on Cognitive IoT with Big Data and Cloud (ICCIBC 2018) organized by School of Computing Sciences in association with Machine Intelligence and Data Analysis Research Centre(MIDARC) during 25th and 26th October 2018.

12.Presented the paper titled "**IoT Based Intelligence Automobile Parking and Number Plate Recognition**" in International Conference on Cognitive IoT with Big Data and Cloud (ICCIBC 2018) organized by School of Computing Sciences in association with Machine Intelligence and Data Analysis Research Centre(MIDARC) during 25th and 26th October 2018.

13.Presented the paper titled "**Pneumonia Detection and Classification using chest x-ray images with CNN**" in the International Conference on Computational Vision and Bio Inspired Computing (ICCVBIC) organized by Intensive Research Organisation on 29-30 November 2018.

14.Presented the paper titled "**Smart Door Lock System Using Face Recognition and email Alert System**" in International Conference on Advancements in Automation, Robotics and Sensing (ICAARS 2018) organized by the Department of Robotics and Automation Engineering, PSG College of Technology, Coimbatore during 14-15 December 2018.

15.Presented the paper titled "**Nanotechnology in medical science and patient observation**" in the National Conference on Recent Research in Advanced Computing (NCRRAC '19) conducted by SRMIST, Ramapuram on 5th April 2019.

16. Presented Poster titled "Deep Learning Based Drowsy Driving Detection System for Road Accidents Prevention" at International Web Conference on Science, Engineering & Technology (IWCSET-2020) held during May 15-16, 2020.
17. Presented a paper entitled "A novel unified scheme for missing image data suggestion based on collaborative generative adversarial network" in the online International Conference on "Challenges and Opportunities in Aeronautics, Astronautics and Aviation" held at Chennai during 30 - 31 May 2020

18. Presented a paper entitled "**Data Integrity and privacy preserving framework using blockchain and edge computing**" in the AICTE sponsored virtual conference on Integration of Advanced Technologies for Industry 4.0 (ICIATI) held on 12<sup>th</sup> and 13<sup>th</sup> June 2020 organised by KCG College of Technology, Chennai, India.

19. Presented a paper entitled "CNN-LSTM based algorithm to detect and counter malicious URLs" in the AICTE sponsored virtual conference on

Integration of Advanced Technologies for Industry 4.0 (ICIATI) held on 12<sup>th</sup> and 13<sup>th</sup> June 2020 organised by KCG College of Technology, Chennai, India.

20. Presented a paper entitled **"A review on multimodal online educational engagement detection system using facial expression, eye movement and speech recognition**" in International e-conference on Information, communication and Networking 2020 organised by the Department of Information Technology, Easwari Engineering College held on 10<sup>th</sup> and 11<sup>th</sup> July 2020.

21. Presented a paper entitled "**A Novel Unified Scheme for missing image data suggestion based on collaborative generative adversarial network**" in the Congress on the Intelligent systems held during September 5<sup>th</sup> and 6<sup>th</sup>, 2020 in India

22. Presented a paper entitled "**Privacy Preserving System and Data Integrity using Distributed Hash Table in Blockchain** " in two days International econference on Recent Trends and Technologies in soft computing(ICRTSC '20) organised by the Department of Computer Science and Applications, St. Peter's Institute of Higher Education and Research, Avadi, Chennai-600054 on 28<sup>th</sup> and 29<sup>th</sup> September 2020.

23. Presented a paper entitled "**Robot with dual axis writing control in service** of disabled people " and received "Best Paper Award" in two days International e-conference on Recent Trends and Technologies in soft computing(ICRTSC '20) organised by the Department of Computer Science and Applications, St. Peter's Institute of Higher Education and Research, Avadi, Chennai-600054 on 28<sup>th</sup> and 29<sup>th</sup> September 2020.

24. Presented a paper entitled "**RESNET: A Convolutional Neural Network for detection and diagnosis of covid-19** " in the first International Conference on Circuits, Signals, Systems and Securities (ICCSSS 2020) held during December 11-12, 2020.

25. Presented a paper entitled "**Privacy Preserving system and data integrated system using Distributed Hash Table in Blockchain**" in the fifth International Conference on Soft Computing: Theories and Applications (SoCTA 2020) held in virtual format, organised in association with STEM Research Society during December 25-27, 2020.

26. Presented a paper titled "**Creative Spatial-Temporal Network Modeling and Analysis Method of Air Quality**" in the 1<sup>st</sup> International Conference for Women in Multifaceted Research(ICWMR-2021).

27. Presented a paper titled "CNN based face emotion recognition to improve human machine interaction" in the 9<sup>th</sup> International Conference of Contemporary Engineering and Technology 2021 held on 10<sup>th</sup> and 11<sup>th</sup> April 2021.
27. Presented a paper titled "Detection of plant disease using Image Processing Techniques" in the 9<sup>th</sup> International Conference of Contemporary Engineering and Technology 2021 held on 10<sup>th</sup> and 11<sup>th</sup> April 2021.

28. Presented a paper titled "**Examining growth and spread of Melanoma using Image Processing and Convolutional Neural Networks**" in the International Conference of Innovation and Technological Developments in 'electronics, Computers and Communication 2021 held on 17<sup>th</sup> and 18<sup>th</sup> May 2021.

29. Presented a paper titled "**Segmenting White Blood Cells with colour space transformation and use of transfer learning with VGG/ResNet**" in the International Conference of Innovation and Technological Developments in 'electronics, Computers and Communication 2021 held on 17<sup>th</sup> and 18<sup>th</sup> May 2021.

30. Presented a paper titled "**Leverage And Discriminant Analysis Of Face Recognition**" in the International Conference of Innovation and Technological Developments in 'electronics, Computers and Communication 2021 held on 17<sup>th</sup> and 18<sup>th</sup> May 2021.

**Academic Experiences:** 8 years of teaching experience as Assistant Professor in SRM University from June, 2013 to till date.

5 years of Teaching experience as Lecturer in Meenakshi College of Engineering, Cheenai.

1.9 Years of Teaching experience as Lecturer in SRM University, Ramapuram.

1 year of Teachning experience as Lecturer in P.R.Engineering College, Thanjavur.

Fdp:

1. Participated in workshop titled "**Data Mining and Data Warehousing**" conducted at Easwari Engineering College at Chennai on 21<sup>st</sup> and 22<sup>nd</sup> July 2006.

2. Participated in FDP, "**Database Management Systems**" at Easwari Engineering College from 30<sup>th</sup> November to 6<sup>th</sup>Decemeber 2009.

3. Participated in a "**Mission10X**" workshop conducted at Easwari Engineering College for Women at Chennai from 7<sup>th</sup> to 11<sup>th</sup> December 2009.

4."**Digital Image Processing**" conducted by Department of CSE, 1<sup>st</sup> and 2<sup>nd</sup> December 2010.

5."Wireless Networks" conducted by Department of CSE, 3<sup>rd</sup> and 4<sup>th</sup> December 2010.

6.Participatedin Workshop titled "Future Wireless Technologies 3G and Beyond" held on 4<sup>th</sup> September 2010, Organized by Computer Society of India Education Directorate, Chennai.

7.Attended Faculty Development Program, "Ripple 2011" held at Cognizant, Chennai

8. "**Securing Cyber Space**" Conducted by Department of CSE and IT in association with Cyber Society of India(CySI) at AarupadaiVeedu Institute of Technology, 24<sup>th</sup> July 2013.

9. "**Prediction Techniques and Machine Learning in Data Analytics**" Conducted by Department of Computer Science and Engineering in association with Lennox India Technology Centre Pvt. Ltd., Chennai. 7<sup>th</sup> and 8<sup>th</sup> December 2017

10. "**Deep Learning for Computer Vision Application from Scratch to Development**" Conducted by Department of Software Engineering , SRMIST, Kattankulathur in association with SWE and IET on 12th -14th September 2019.

### **Other Professional Experiences:**

- IEI Member
- Member in IAENG society of software engineering and IRED

### Achievements and Awards:

- Certified Internal Auditor ISO 9001:2000.
- TRP Academic Excellence Award 2020-21

### **Certification Course:**

- Cloud Computing in NPTEL
- Internet of Things in NPTEL
- Introduction to Big Data Coursera

- Machine Learning for all Coursera
- Programming for Everybody-Python Coursera
- Use canva to design digital course collateral Coursera
- Deep Learning Guvi
- Step into RPA -Guvi
- Introduction to Object Detection Guvi