Dr. Renjith Thomas

PhD in Computer Vision

Approved APJAKTU Research Supervisor

Scouting for a progressive career in the area of teaching in a reputed organization by contributing the best of my knowledge and experience to the organization.

PERSONAL DETAILS

- Date of Birth: 05/07/1984
- Sex: Male
- Nationality: Indian
- Religion: Christian
- Marital Status: Married
- Children: 3

CONTACT

Ampattkunnel (H),
Puthusserry (PO),
Mallappally,
Pathanamthitta,
689602

📞 9 4 4 6 1 1 5 8 1 7

✉ renampatt@gmail.com

Skills

- Python
- NLP
- DL
- ML
- Computer vision
- Google COLAB
- MATLAB
- C#
- C
- Visual studio.NET

WORK EXPERIENCE

Associate Professor & HoD,
Department of Artificial Intelligence & Data Science

St Joseph's College of Engineering and Technology Palai from 19 Jan 2024 to till date

- APJAKTU -CERD - Financial Assistance to Student Projects 2024-25. Principal investigator: Dr Renjith Thomas, Title of the Project: LASER ARMED SURVEILLANCE ENGINE, Total amount sanctioned Rs 21,000/-
- 3 International Scopus Indexed Conference Paper Published
- 1 PhD Scholar registered
- GenAI.Works #BuildwithAI International Hackathon, 5th Place with price money of 750$ and one NVDIA Graphis Card
- Participant of International Symposium organized by IISR Delhi
- Resource person of seminar on Revolutionizing Hospitality: Role of AI on 24th January2025
- Pass Board Chairperson for the End Semester Examination (First Semester-Regular) for BTech - Artificial Intelligence and Data Science
- Mentor of Prototype Demonstration program organized by the Start up cell of APJAKTU held at College of Engineering Trivandrum on 26-10-2024. Got the grant of Rs 25000/-
- Got the certificate of registration of design to Smart Healthcare Monitoring Apparatus
- Successfully completed the EBSCO Training on EBSCO eBooks/ECM
- Participated in the online training/webinar on "IEEE Xplore" organized by SJCET Palai
- Published the Volume 3059: proceedings of the International Conference on Research Advances in Engineering and Technology- ITechCET 2022 on Sept 2024
- SJCET college council member
- SJCET Anti-ragging committee member
- SJCET IQAC faculty representative
- SJCET academic audit member
- SJCET research advisory board member
- Evaluator of INNOBOR- a 24 hour Hackathon conducted as part of PRAYANA 24 by IEEE RAS Kerala Chapter
- Reviewer for 2nd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON)
- Reviewer of International Conference on Computational Intelligence and Digital Technology ICCIDT 2K24, AIP Publishing
- Participated one day regional meeting organized by Additional Skill Acquisition Programme, Kerala on 27th may 2024
- University Question Paper Setter of two Courses 2024 - 2025
- Syllabus Revision of KTU 2024, PEADT 526 Computational Biology

ORCID: https://orcid.org/0000-0002-1038-9596
Researcher ID: https://publons.com/researcher/4624495/renjith-thomas/
Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=57192674628
Google Scholar: https://scholar.google.com/citations?user=oCnr0xsAAAAJ&hl=en
Google Scholar Citations since 2017: 189 Citations as on 28/02/2025

Associate Professor

Musaliar College Pathanamthitta from 03 July 2019 to 18 Jan 2024

- NBA Program Coordinator (Got NBA in ECE 2023-2026)
- Dean Research.
- Kerala Startup Mission - IDEA Fest 2022 awarded Rs 2,00,000 (Two Lakhs) as seed money.
- Working demo of AI based offence detection at Ente Keralam program conducted by Govt of Kerala.
- 1 IEEE conference presented Dec 2023.
- 1 Indian Patent filed.
- **APJAKTU Research Guide** 1 Scholars registered
- 1 International Scopus Indexed Conference Paper Published
- 1 Australian Patent
- 1 UK Design Patent

Assistant Professor

GISAT Kottayam from 18 June 2012 to 2 July 2019 (7 Years).

- PG Coordinator
- 2 International Conferences

Lecturer

Government Polytechnic College Nedumkandam for 8 Months.

- Guest Lecturer

Software Engineer

XUSLIMITS Kollam, 3.5 Years.

- Software Programmer

EDUCATION BACKGROUND

PhD

Hindstan Institute of Science and Technology Chennai

- Image Processing, 30 April 2019
- 2 SCIE indexed Journals
- 3 International Journals
- 2 International IEEE Conferences

MTech

- Anna University Chennai
- Applied Electronics, 2010-2012
- 2 National Conference Papers

BTech

- MGU Kottayam
- Electronics and Communication Engineering, 2002-2006

RESEARCH PUBLICATIONS

Journals

1. Thomas, R., & Rangachar, M. J. S. (2017). Fractional bat and multi-kernel-based spherical SVM for low resolution face recognition. International Journal of Pattern Recognition and Artificial Intelligence, *World Scientific*, 31(08), 1756014.
2. Thomas, R., & Rangachar, M. J. S. (2016). Integrating GWTM and BAT algorithm for face recognition in low-resolution images. *The Imaging Science Journal*, 64(8), 441-452.
3. Thomas, R., & Rangachar, M. J. S. (2016). Towards Proposing Gabor Ratio Measures and Fuzzy Logic Classifier for Face Recognition. International Journal of Applied Engineering Research, *RIP Publication*, 11(11), pp 7200-7211.
4. Thomas, R., & Rangachar, M. J. S. (2019). Fractional rider and multi-kernel-based spherical SVM for low resolution face recognition. *Multimedia Research*, 2(2), 35-43.
5. Thomas, R., & Rangachar, M. J. S. (2018). Hybrid optimization based DBN for face recognition using low-resolution images. *Multimedia Research*, 1(1), 33-43.

Patent

Title of invention: **Secure Device To Device Connectivity Mechanism for IoT Smart City Applications.**
Publication date: 28/04/2021
Patent office : IP Australia
Patent number: 2021101443
Inventors: Panneer Selvam N, M. Sangeetha, P. Shanthi, Karthik N., G. Murugesan,
Renjith Thomas, C. Partha, A. Vimala Juliet, V. R. Lakshmiprabha, K. E. Prakash, V. R.

Title of invention: **AI Enabled Under Water Pollution Tracking Device.**
Design number: 6336195
Publication date: December 2023
Patent office : UK Design Patent
Grant date: 13 January 2024
Inventors: Dr. Ajesh Fysal, Dr. Felix Mattathil Philip, Ms. Anupama Jims, Dr. Renjith Thomas

Title of invention: **Smart HealthCare Monitoring Apparatus**
Application Number: 424211-001
Cbr Number: 212897
Cbr Date: 22/07/2024 19:41:17
Patent office : Certificate of Registration of Design, The Patent Office Government of India
Applicant Name: Asha Susan John, Amjith Noushad, Richu Jacob Johnson, Bibin Binu, Lijesh L, Renjith Thomas

Conferences

1. Sabu, D., Jose, A., Philip, J., Pranav, P., Thomas, R., & Mathew, J. (2024, November). Automated Mark Entry in Educational Institutions Using Multiple CNNs: A Case Study on Recognizing Handwritten Fractional Marks. In 2024 International Conference on Computational Intelligence and Network Systems (CINS) (pp. 1-8). IEEE.
2. R. S. Sen, M. Amalkrishna, R. Prithviraj, S. P. Jose, N. Joseph and R. Thomas, "Simple Action Model: Enabling LLM to Sequential Function Calling Tool Chain," 2024 International Conference on Advancement in Renewable Energy and Intelligent Systems (AREIS), Thrissur, India, 2024, pp. 1-6. IEEE
3. R. Thomas, A. F, A. S. John and S. K. S, "Automated Detection of Traffic Rule Violation using Deep Learning Techniques," 2024 IEEE Recent Advances in Intelligent Computational Systems (RAICS), Kothamangalam, Kerala, India, 2024, pp. 1-6. IEEE
4. Habeeb, N., Thomas, R. and Oommen, K., 2023, December. Automated Detection of Pneumonia Using Pre-Trained Convolutional Neural Networks in X-Ray Images. In 2023 3rd International Conference on Mobile Networks and Wireless Communications (ICMNWC) (pp. 1-6). IEEE.
5. Thomas, R. "Face recognition from image patches using an ensemble of CNN-local mesh pattern networks". IEEE 6th International Conference for Convergence in Technology (I2CT) (pp. 1-5) 2021.
6. Thomas, R., & Rangachar, M. J. S. GWTM and crow search algorithm for face recognition in low-resolution images". IEEE International Conference on Advances in Computing, Communication Control and Networking (ICACCCN) (pp. 963-970) 2018.
7. Presented Thomas, R., & Rangachar, M. J. S. "Genetic algorithm optimization and Multi-kernel-based spherical SVM for Low-Resolution face recognition." *IEEE* Third International Conference on contemporary computing and informatics (ic3i-2018).

Books

- Abstract Proceedings of the International Conference on Research Advances in Engineering and Technology - ITechCET 2021, Dr Shan M Assis, Dr Kurian Antony, Dr I Bushra, Dr Ajesh F, **Dr Renjith Thomas,** Dr Teena Joseph, Wizcraft Publications and Distribution.

Publication date: June 2023

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https://printorders.aip.org/proceedings/2520

- Abstract Proceedings of the International Conference on Research Advances in Engineering and Technology - ITechCET 2022, Dr Shan M Assis, Dr Ajesh F, Dr I Bushra, Dr D Chithra Prasad, **Dr Renjith Thomas**, Dr Ciby Jacob Cherian, Dr Teena Joseph, Dr Sonia Katherine, Wizcraft Publications and Distribution.

Issue Date: 09/03/2023

ISBN: 978-93-92268-31-1

https://isbnnew.inflibnet.ac.in/Recently_Published_Books.aspx

Achievements

- Secured fifth position for #BuildwithAI Hackathon 2024 among 200 teams from across 80 countries.
- Kerala Startup mission - IDEA Fest 2022 awarded Rs 200000 (Two Lakhs) as seed money from 17 Lakhs for Artificial Intelligence based vehicle modification detector.
- International Conference Editor (Scopus Indexed)- ITechCET-2021 - AIP (American Institute of Physics) 2021.
- International Conference Editor (Scopus Indexed)- ITechCET-2022 - AIP (American Institute of Physics) 2022.
- Reviewer of Hindawi Publications 2020.
- AICTE Technical Book Reviewer "Industrial Electronics" 2024.
- IEEE Conference Reviewer, AICTE Sponsored IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON) 2023.
- Session Chair, RTACT 2023 National conference.
- Coordinator of Ente keralam program from institution-Winner Open Area Stall 2023.
- Reboot Kerala Hackathon Finalist 2019.
- 2 NPTEL MOOC Courses.
- APJAKTU MTech BOS Subcommittee member

Declaration

I hereby declare that all the above furnished information is true to best of my knowledge and belief.

Date: 28/Feb/2025   Dr. Renjith Thomas