### Dr.C.AKILA

Assistant Professor & Head of the Department Department of Computer Science and Engineering Anna University Regional Campus-Tirunelveli

Tirunelveli-627007

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> <u>Research Area:</u> Image Processing, Soft Computing, Pattern Recognition, Medical Image Processing

## **Educational Qualifications:** B.E.,M.E.,Ph.D.,

Qualification	Department	Year (From -To)
B.E	CSE	2000-2004
M.E	CSE	2006-2008
Ph.D	ICE	2010-2017

## > Experience:

Name of Company / Institutions	Designation of Post	From	То	Relived on	Experience in Year
S.Veerasamy	Lecturer	05-01-2005	19-06-2006	19-06-2006	1year 6
chettiar college of Engineering					months
and Technology					
National	Lecturer	07-05-2008	28-08-2009	28-08-2009	1 year 3
Engineering					months
College					
Anna University	Assistant	31-08-2009	Till Date	-	15 years 2
Regional	Professor				months
Campus-					
Tirunelveli					

## > Awards and Recognitions:

- a. Ranked **Second** in the College in Master of Engineering, 2008
- b. **NPTEL Appreciation certificate and Honorarium** received for translated the files of the course 'Programming, Data Structures and Algorithms (106106127) offered by IIT Madras in 'Tamil' language, 04/10/2023



- c. **NPTEL Appreciation certificate and Honorarium** received for translated the files of the course 'Database Management System (106105175)offered by IIT Kharagpur in 'Tamil' language, 22/04/2021
- d. **NPTEL Appreciation certificate and Honorarium** received for translated the files of the course 'Software Project Management ((106105218) offered by IIT Kharagpur in 'Tamil' language, 09/09/2020
- e. **Certificate for Mentor** received for the team participated in Grand Finale of 'Smart India Hackathon (SIH 2020)' organized by MHRD, New Delhi on 1 to 3 August 2020.
- f. **Appreciation Letter** received for delivering Expert lecture on Compiler Design in the Anna University Chennai sponsored Faculty Development Training Programme (FDTP) organized by National Engineering College, Kovilpatti on 19-12-2019.
- g. **Appreciation Letter** received for training the students on Basics on Python Programming in the National level workshop on Python programming for Beginners NLWPPB'19 by department of Computer Applications, Anna University Regional Campus Tirunelveli, 27 & 28 September 2019.
- h. **Letter of appreciation** received from IIT Bombay for the contribution as a "Discussion forum moderator" of the AICTE approved Ten weeks MOOC: FDP201x Pedagogy for Online Blended Teaching Learning Process conducted by IIT Bombay between 30.10.2018 to 06.01.2019
- i. **Letter of appreciation** received from IIT Bombay for the contribution as a "Discussion forum moderator" of the AICTE approved five weeks MOOC: FDP101x Foundation Program in ICT for Education conducted by IIT Bombay between 13.09.2018 to 21.09.2018.
- j. **Appreciation certificate** from District Police Office for the successful Completion of Software Project "Automation of District Police Office" by Superintendent of Police, Tirunelveli District during the year 2016-17.
- k. **Appreciation Letter** received for handling sessions as a resource person in the Faculty Development Training Programme on "CS6601 Distributed Systems" organized by Department of Computer Science, Anna University Regional Campus -Tirunelveli on 28-11-2017 & 29-11-2017.
- 1. **Appreciation Letters** received for handling sessions as a resource person in the Faculty Development Training Programme on "IT6702 Data Warehousing and Data Mining" organized by Department of Computer Science, Anna University Regional Campus -Tirunelveli on 29-05-2016
- m. **Appreciation Letter** received for delivered Guest lecture in the Faculty Development Programme on "Mobile and Pervasive Computing" conducted during 4th 10th June 2013 and sponsored by Centre for Faculty Development, Anna University, Chennai.

- n. **Appreciation Letter** received for delivered Guest lecture in the Faculty Development Programme on "Digital Image Processing" conducted during 7th 13th December 2012 and sponsored by Centre for Faculty Development, Anna University, Chennai.
- o. **Appreciation Certificate** received for delivered Guest lecture as a resource person in three days workshop on "Soft Computing Techniques and its Applications" from 4th -6th March 2013.

## > Additional / Academic Responsibilities at University:

- a. Head of the Department, Department of Computer Science and Engineering, Anna University Regional Campus from 20.09.2023 to till date.
- b. Faculty In-Charge, MHRD's Institution's Innovation Council Anna University Regional Campus Tirunelveli from 13-01-2021 to Till Date.
- c. Faculty In Charge, Purchase Anna University Regional Campus Tirunelveli from 04-11-2020 to Till Date.
- d. Faculty In Charge, MHRD's Institution's Innovation Council, University College of Engineering, Nagercoil from 29-10-2019 to 30-07-2020
- e. Faculty In charge, Central Library of Anna University Regional Campus Tirunelveli from 04.07.2016 to 31.01.2019.
- f. Member Inspection Committee for Affiliation of institutions, Anna University, Chennai.
- g. Member Research Inspection Committee for Research Affiliation of institutions, Anna University, Chennai.
- h. Member, Squad Team for Anna University Examinations.
- i. Acted as Chief AUR, AUR for the conduct of Anna University Theory Examinations.
- j. Question paper setter for erstwhile University Departments and Autonomous Colleges affiliated to Anna University.
- k. Answer Key setter for erstwhile University Departments, Anna University, Chennai and Autonomous Colleges affiliated to Anna University.
- 1. Acted as In-charge for CSE department student technical association "TechSociety".
- m. Acted as Timetable coordinator for CSE department.
- n. Acted as Anna University Lab External Examiner, External Viva Voce examiner for UG and PG.
- o. Acted as Project Co Ordinator for UG and PG Project Phase.
- p. Carried out Anna University Exam Theory Examination Hall invigilation duty
- q. Acted as Class Committee Chair person in other department and CSE Department.
- r. Acted as Class Advisor in CSE and IT department both UG and PG.

### > Professional Activities:

- 1. Reviewer of Elsevier Journals
- 2. Reviewer of Inder-science Journals
- 3. Co Ordinator and Trainner for two weeks Trianing Program on "The Computer Awareness Competition All India Police Meet program" for the police persons is held from 09.07.2018 to and 20.07.2018 conducted by Department of Computer Science and Engineering, Anna University Regional Campus Tirunelveli
- 4. Handled Sessions in Faculty Development Programme in other Engineering Colleges.
- 5. Handled sessions in Faculty Development Programme of ECE department and CSE Department in Anna University Regional Campus.
- 6. Coordinator of Workshops, Conferences, Faculty Development Programme.

### > Membership of Scientific and Professional Societies:

IEI - Life Member (AM 1273550)

ISTE- Life Member (LM 92626)

# > Fellowships and Grants:

Nil

# > Completed B.E/M.E Projects:

a. Number of ME Projects Completed: 31 Nosb. Number of BE Project Completed: 21 Nos

## > PhD Guided:

o Completed: 2

o Ongoing: 3

# PhD Research Projects (Ongoing):

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# > Sponsored Research Activities:

***PROJECT	NAME***
Duration:	_ Years
Role:	
Agency :	

Amount:
> Consultancy Activities:
***PROJECT NAME***
Duration: Years
Role:
Agency:
Amount:

# > <u>List of Seminar / Short Term Course /FDP/ Workshop attended: (Within India)</u>

- a. Received Elite Certificate for the 12 weeks NPTEL AICTE faculty Development Programme funded by MoE, Govt of India of the course "Introduction to Internet of Things" from January to April 2024.
- b. Attended and received certificate for Anna University, Chennai sponsored Faculty Development Training Programme (Physical Mode) on "Compiler Design (CS3501)" during July 31st to August 05th, 2023 in National Engineering College, Kovilpatti. (**One Week**)
- c. Attended and received certificate for Two week online Industrial Training on Cyber Security Essentials organized by C-DAC Hyderabad from 20.06.2022 to 01.07.2022.(**Two Weeks**)
- d. Attended and received certificate for Online 8 -Module course organized by NITTT AICTE through Swayam online portal from 01.04.2022 to 31.05.2022.
- e. Attended and received certificate for FDP on Student Induction (Universal Human Values (UHV) online workshop "Incorporating Universal Human Values in Education" conducted by AICTE New Delhi from 25.04.2022 to 29.04.2022. (**One Week**)
- f. Attended and received certificate for FDP on Student Induction UHV online workshop ""Incorporating Universal Human Values in Education" conducted by AICTE New Delhi from 04.10.2021 to 08.10.2021.(**One Week**)
- g. Received Three weeks Industrial Training on "Communication and Networking Technologies" organized by RGMTTC, BSNL, Meenambakam, Chennai from 01-06-2020 to 19-06-2020. (**Three Weeks**)
- h. Received Certificate for successful completion of Two Weeks Faculty Development Programme on "Managing Online Classes and Co-creating MOOCS" sponsored by Human Resource Development Pandit Madan Mohan Malviya National Mission on Teachers and Teaching organized by Ramanujan College, University of Delhi from April 20 to May 06, 2020. (**Two Weeks**)
- i. Participated Faculty Development Training Programme on CS 8501 Theory of Computation conducted by Department of Computer Science and Engineering,

- at Anna University Regional Campus Tirunelveli from 29-04-2019 to 05-05-2019. (**7 Days**)
- j. FDP on "Entrepreneurship Development and Innovation Institute" conducted by PMO-IEDP (Programme Monitoring Office Innovation and Entrepreneur Development Programme) at Anna University Regional Campus Tirunelveli during 27.08.2018 to 29.08.2018. (3 Days)
- k. AICTE approved "FDP301x Mentoring Educators in Educational Technology" conducted by IIT Bombay under Pandit Madan Mohan Malaviya Mission for Teachers and Teching (PMMMNMTT), MHRD, GoI at Anna University Regional Campus Tirunelveli during 17.05.2018 to 27.06.2018 (2 Weeks)
- 1. AICTE approved "FDP201x Pedagogy for Online and Blended Teaching-Learning Process" conducted by IIT Bombay under Pandit Madan Mohan Malaviya Mission for Teachers and Teching (PMMNMTT), MHRD, GoI at Anna University Regional Campus Tirunelveli during 14.9.2017 to 12.10.2017 (**2 weeks**).
- m. AICTE approved "FDP101x Foundation Program in ICT for Education" conducted by IIT Bombay under Pandit Madan Mohan Malaviya Mission for Teachers and Teching (PMMMNMTT), MHRD, GoI atAnna University Regional Campus Tirunelveli during 3.8.2017 to 7.9.2017 (2 weeks).
- n. Attended Two days Faculty Development Programme on Emotional Intelligence from 28,29 August 2017 at Wavoo Wajeeha Women's College Of Arts & Science, Thoothukudi. (**2 Days**)
- o. "Hands-on Workshop Python Programming" conducted by Centre for Academic Courses, Anna University, Chennai sponsored by Centre for Faculty Development, Anna University, Chennai during 21.08.2017 to 22.08.2017 ( 2 days).
- p. Attended one day National Workshop on "Deep Learning" conducted during July 29, 2017 in Mepco Schlenk Engineering college, sivakasi. (1 Day)
- q. Participated workshop session on Intelligent Networks on 9.2.2017 in Anna Univerity Regional campus-Tirunelveli. (**1 Session**)
- r. Participated two days DBTsponsored workshop on Modern Computing Technologies for Affective brain computer interface (ABCI) from 8, 9 January 2016 in National Engineering College, kovilpatti.( **2 Days**)
- s. Participated Faculty Development Training programme on CS 6660 Compiler Design at SCAD college of Engineering and Technology from 7-13 December 2015. (**7 Days**)
- t. Participated two week STTP on Technical Communication by IIT Bombay from 8 October to 5 December 2015 (**2 Weeks** 59 Days)
- u. Participated National Seminar on High Impact Journal writing and publishing by Regional Office, Anna University, 25<sup>th</sup> September 2014. (**1 Day**)
- v. Participated one day seminar on Research expansion in Digital image processing by Anna University Tirunelveli Region, 28th February 2014. (**1 Day**)

- w. Participated Two weeks ISTE workshop on Signals and systems by IIT Kharagpur from 2-12 January 2014. (**2 Weeks –** 11 Days)
- x. Participated in Faculty Development training programme on Mobile and Pervasive computing from 4-10 June 2013 in Regional Centre of Anna University Tirunelveli. (**7 Days**)
- y. Participated NPTEL workshop on 20th April 2013 by IIT madras. (1 Day)
- z. Participated two days workshop on Hands on Approach to wireless networks using Simulation using NS2, on 4<sup>th</sup> and 5<sup>th</sup> December 2012 in Regional centre, Anna University, Tirunelveli. (**2 Days**)
- aa.Participated Two day ISTE workshop on Aakash for Education by IIT Bombay on 10, 11 November 2012. (**2 Days**)
- bb. Participated two days national seminar on "Research Motivation A perspective" on 30.11.2012 and 01.12.2012, National Engineering College, kovilpatti. (**2 Days**)
- cc. Attended Two days workshop on Research issues in Medical Image Analysis by Thiagarajar college of engineering from October 20-21, 2011. (2 Days)
- dd. Attended three days workshop on Image Processing Techniques in Amrita School of Engineering during January 5-7, 2009. (**3 Days**)
- ee. Attended Five days Workshop on Mission 10x conducted by Wipro organized by Mepco schlenk Engineering College during 01.06.2009 to 05.06.2009. (**5 Days**)

# > Conference, Workshop, Seminar and FDP organized:

- a. Coordinator and conducted AICTE -ISTE sponsored (93,000/- thousand)) online one week FDP on Medical Data Analytics with Python from **04/01/2022 to 10/01/2022.**
- b. Appointed as a SPOC faculty for Smart India Hackathon (SIH 2020) organized by MHRD from 29-10-2019 to 30-07-2020.
- c. Co Ordinator for conducting online quiz on World Intellectual Property Rights (IPR) Day on 30-04-2020 by Institution Innovation Cell (IIC), University College of Engineering, Nagercoil.
- a. Co-Ordinator for Entrepreneurship Development Cell (EDC) & Institution's Innovation Council (IIC), University College of Engineering, Nagercoil Organizing Webinar on DEVELOPMENT OF BUSINESS PLAN on 19-06-2020.
- a. Co-Ordinator for Institution's Innovation Council (IIC), University College of Engineering, Nagercoil Organizing Webinar on PASSION TOWARDS INTELLECTUAL PROPERTY RIGHTS (IPR) on 26-06-2020
- b. One of the Co-Ordinator for the Two Days workshop on "Hands on Approach to Proficient Document Writing using LateX" on 12th & 13th November 2013.
- c. One of the Co-Ordinator in Seven Days Faculty Development Programme on "Data Warehousing and Data Mining" during 25-31 December 2015.

- d. Two Days National Conference on Computing and Communication (NCCC'14) on April 3rd & 4th, 2014.
- e. Two Days National Conference on Computing and Communication (NCCC'15) on May 4th & 5th, 2015.

## > International Conferences Participated and Published:

### > Publications:

a. **Book Chapter:** A book chapter titled "A deep learning approach toward prediction of mental health of Indians" as a sixth chapter in Artificial Intelligence, Machine Learning, and Mental Health in Pandemics: A computational approach by Elsevier publications 2022, Pages 141-165. https://doi.org/10.1016/B978-0-323-91196-2.00009-0

### b. Patent Filed:

Indian Patent Application No.202041052243 A – AN IMAGE RESTORATION METHOD FOR MAGNETIC RESONANCE IMAGING is filed and published in patent journal after initial screening on 11/12/2020.

### c. International Journals:

- S Alagu Rani, C Akila, SP Raja, Guided Intelligent Hyper-Heuristic Algorithm for Critical Software Application Testing Satisfying Multiple Coverage Criteria, Journal of Circuits, Systems and Computers, Vol. 33, issue. 2, January 2024, Page No. 2450029, 2024.
- 1. V Selvakumar, C Akila, Efficient diabetic retinopathy diagnosis through U-Net-KNN integration in retinal fundus images, Automatika, Journal for Control, Measurement, Electronics, Computing and Communications Vol.64, issue. 4, October 2023, Page No. 1148-1157, 2023.
- 2. M Suganthi, **C Akila,** Prioritized air light and transmittance extraction (PATE) using dual weighted deep channel and spatial attention based model for image dehazing, Pattern Analysis and Applications, Vol.26, issue. 3, August 2023, Page No. 969-985, 2023.
- 3. **Akila, C** & Varatharajan, R 2018, Color fidelity and visibility enhancement of underwater image de-hazing by enhanced fuzzy intensification operator, Multimedia Tools and Applications, Vol.77, issue 4, February 2018, pp 4309–4322, 2018.
- **4. Akila, C** & Kavitha, V 2016, Multiobjective Genetic Algorithm and Enhanced Fuzzy Peer Group method for Medical Image Restoration, Journal Medical Imaging and Health Informatics, vol. 6, issue 8, December 2016, pp. 1929-1933.

- 5. **Akila, C** & Kavitha, V 2016, Color Image Restoration: A Technical Survey, Advances in Natural and Applied Sciences, vol. 10, issue. 14, pp.183-192.
- C.Revathy, C.Akila, An Efficient Approach to retrieve multi objects from satellite Imagery using EBB indexing Bonfring International Journal of Advances in Image Processing, Vol. 2 Special Issue 1, Part 2, Feb 2012, Pg 100-101.
- 7. S. Karpagalakshmi, **C. Akila**, Dr.V. Kavitha, Image Denoising using Principal Neighborhood Dictionary Non Local Means for Color Images , CiiT International Journal on Digital Image Processing, Vol 3, No 4 (2011).
- 8. K. Karthika, **C. Akila**, Dr.V. Kavitha, Fuzzy Filtering for Restoration of Color Images by Reducing Gaussian and Impulse Noise, CiiT International Journal on Digital Image Processing, Vol 3, No 9 (2011)
- 9. Paul Jebakumar, **C.Akila**, Texture Classification using Wavelet Packet Decomposition Based on SGS & MISS algorithm CiiT International Journal of Digital Image Processing, Vol.2, No.3, 2010, pp. 106-110. ISSN 0974 9691, I: DIP032010006.
- 10. S.Meenakshi, **C.Akila**, Image Watermarking Using Visual Perception Model and Statistical Features, International Journal of Engineering and Technology Vol.2(3), 2010, 194-199.
- 11. Divya, S, **Akila, C** & Kavitha, V 2013, Robust iris recognition using fuzzy matching on local features with indexing method, Proceeding of IEEE International Conference on Communications and Signal Processing (ICCSP), pp. 830-835.
- 12. R. Amali Therese Jenifa, **C. Akila**, V. Kavitha, Rapid background subtraction from video sequences, IEEE International Conference on Computing, Electronics and Electrical Technologies (ICCEET), 2012, 21-22 March 2012.

### d. National Journals:

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## > Conferences

### a. International Conferences:

- 1. Antony Sophia, **C.Akila**, "Efficient performance in retrieval of images from multimedia Database by an automated process", International conference on Intelligent science and Technology, SUN college of engineering and technology.
- 2. Meenakshi, **C.Akila**, "Image watermarking using visual perception model and statistical features", International conference on Intelligent science and Technology, SUN college of engineering and technology.
- 3. C.Revathy, **C.Akila**, Dr.V. Kavitha, "Bitmap based indexing for retrieval of multiscale objects from satellite image archives", International conference on computing and communication technology in May 2012.
- 4. R.Amali Therese Jenifa, **C.Akila**, Dr.V.Kavitha, "Detection of moving objects in video sequences", International conference on Recent trends in computational methods communication and controls, April 2012.
- 5. A.Ponnuchamy.**C.Akila**,"Biometric identification system using Hand biometrics", International conference on Innovations in communications, information & computing, Jan 2013.

### b. National Conferences:

- 1. C.Akila, Dr.V.Seenivasagam, "Study and Analysis of Image Restoration Techniques" presented in 6th National Conference on Advanced Image Processing and Netwroking by Department of computer science and Engineering on 5-6, March 2010 at National Engineering College, Kovilpatti.
- 2. Meenakshi, C.Akila, "Innovative approach for watermarking based visual perception model and statistical feature" presented in 6th National Conference on Advanced Image Processing and Netwroking by Department of computer science and Engineering on 5-6, March 2010 at National Engineering College, Kovilpatti.
- 3. Meenakshi, C.Akila, "The effective way for Image Watermarking using visual perception model based on statistical features" in CSIR sponsored national conference on Data mining and Image processing held on 19th February 2010 in SCAD college of Engineering and Technology, cheranmahadevi.
- 4. Paul Jeba Kumar, C.AKila, "An effective approach for texture classification using wavelet packet decomposition based on MISS and fuzzy C-means algorithm", National conference on signal processing, communications and VLSI design, Anna University Coimbatore.
- 5. Paul Jeba Kumar, C.AKila,R.Mercy,M.Deepa Lakshmi, "Texture classification uisng wavelet packet Decomposition based on SGS & MISS

- Algorithm",in CSIR sponsored national conference on Data mining and Image processing held on 19th February 2010 in SCAD college of Engineering and Technology,cheranmahadevi.
- 6. Antony Sophia, C.Akila, "Efficient performance in retrieval of images from multimedia database by an automated process", National conference on computer science and applications, Mepco schlenk Engineering college.
- 7. Antony Sophia, C.Akila, "2D walking ant histogram descriptor over multimedia database", National Conference on Image Processing and Networking, National Engineering College.
- 8. C.Revathy, C.Akila, "An Efficient Approach to retrieve multi objects from satellite Imagery using EBB indexing", National conference on Communication Technology Interventions for rural and social Development in Feb 16,17th 2012.
- 9. R.Amali Therese Jenifa, C.Akila, Dr.V.Kavitha, "Quick foreround detection in video sequences" National conference on advanced VLSI image processing & communication systems, April 2012.
- 10. S.Muthulakshmi Gowri, C.Akila, "Color saturated exposure fusion with fine details", National conference on Information science and Engineering, April 2013.
- 11. M.Gomathi Chitra, C.Akila, "Super Resolution of single image using Incoherent sub dictionary learning", National conference on Information science and Engineering, April 2013.
- 12. R.Indhu, C.Akila, "GMM-EM based automatic segmentation for slowly moving object ", National conference on Information science and Engineering, April 2013.
- 13. M Suganthi, C Akila, Convolution Neural Network Approach for Satellite Object Detection and Recognition, 2023 IEEE, International Conference on Network, Multimedia and Information Technology (NMITCON), Pages 1-6, 2023.

### **DECLARATION:**

I CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT TO THE BEST OF KNOWLEDGE AND BELIEF.

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DATE: 31.08.2022 Signature