# Dr.M.ANNALAKSHMI, M.E., Ph.D.

Associate Professor,

Department of Electronics Engineering (VLSI Design and Technology) Velammal College of Engineering and Technology, Madurai

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## **Educational Qualification**:

| S.No. | Class/<br>Course | Specialization                                  | Year<br>of Passing | - · · ·                     | Agg. % /<br>CGPA | Institution /<br>Place   | University /<br>Board         |
|-------|------------------|---|--------------------|-----------------------------|------------------|--|-------------------------------|
| 1.    | Ph.D             | Information and<br>Communication                | 2019               | -                           | -                | Thiagarajar<br>College of<br>Engineering,<br>Madurai                           | Anna University               |
| 2.    | M.E              | Optical<br>Communication                        | 2005               | I Class with<br>Distinction | 80               | Alagappa<br>Chettiar College<br>of Engineering<br>and Technology,<br>Karaikudi | Anna University               |
| 3.    | B.E              | Electronics and<br>Communication<br>Engineering | 1998               | I Class                     | 72               | Thiagarajar<br>College of<br>Engineering,<br>Madurai                           | Madurai Kamaraj<br>University |

**Experience in Years: 24 Years** 

# **Employment History:**

| Category   |            | iod        | No. of    | Designation            | Institute  |  |
|------------|------------|------------|-----------|------------------------|--|--|
| <i>C</i> , | From       | То         | Years     | 8                      | /Organization  |  |
|            | 03.06.2024 | Till date  | 1 Y       |                        | Velammal   |  |
|            |            |            |           | Asso, Professor        | College of   |  |
|            |            |            |           |                        | Engineering and  |  |
|            |            |            |           |                        | Technology   |  |
|            |            |            |           |                        | Karpagam   |  |
|            | 02.08.2021 | 11.05.2024 | 2 Y 10 M  | Professor              | College of   |  |
|            | 02.08.2021 | 11.03.2024 | 2 1 10 WI |                        | Engineering,   |  |
|            |            |            |           |                        | Coimbatore   |  |
| Academic   | 01.03.2020 | 24.11.2020 | 0.75      | Professor              | Sethu Institute of<br>Technology,<br>Pulloor,<br>Kariapatti. |  |
| readonie   | 01.01.2011 | 28.02.2020 | 9.17      | Associate<br>Professor |  |  |

| 01.07.2010 | 31.12.2010 | 0.5  | Assistant<br>Professor<br>(Selection Grade) |  |
|------------|------------|------|---|--|
| 01.01.2008 | 30.06.2010 | 2.5  | Assistant<br>Professor                      |  |
| 01.11.2006 | 31.12.2007 | 1.17 | Senior Lecturer                             |  |
| 03.07.2000 | 31.10.2006 | 6.33 | Lecturer                                    |  |

# **Interested Research Areas:** Image Processing, Pattern Recognition, Computer Vision **Scholarships and Awards received:**

- Top 1% performer in NPTEL Digital Electronic Circuits course
- **Top 2%** performer in NPTEL Introduction to Internet of Things
- Top 2% performer in NPTEL Principles of Signals and Systems course
- Top 5% performer in NPTEL Digital Design with Verilog course
- Appreciation award for being recognized as NPTEL DISCIPLINE STAR Jul-Dec 2024
- Appreciation award for being recognized as **NPTEL DISCIPLINE STAR** Jul-Dec 2021
- Attained **Elite** + **Silver** in NPTEL Joy of Computing using Python course
- Attained **Elite** + **Silver** in NPTEL System Design Through Verilog Course
- Attained **Elite** + **Silver** in NPTEL Hardware Modeling Using Verilog

## Patent rights received:

- Application Number: 202241021623, Title of Invention: Internet of Things, Artificial Intelligent, Machine Learning Based Smart Automation and Control of smart Television Using Python Language, Publication Date (U/S 11A): 22/04/2022
- Application Number: 202341064324, Title of Invention: Wind and Solar hybrid powers system for generating energy, Publication Date (U/S 11A): 06/10/2023

### **Publications Details:**

#### 2. International Journal Publication Details:

Murugeswari, P., Kopperundevi, N., Annalakshmi, M., S Scinthia Clarinda, "An effective reconstructed pyramid crosspoint fusion for multimodal infrared and visible images", SIViP 18, 6769–6782 (2024). https://doi.org/10.1007/s11760-024-03350-7

- M Annalakshmi, S Mohamed Mansoor Roomi, "Age group classification based on Bins of Gradients over Gradient Hessianspace facial images", The Imaging Science Journal 70 (4), 228-237, 2023
- T. Senthil Prakash, Annalakshmi M, Siva Prasad Patnayakuni & S. Shibu, "Municipal Solid Waste Prediction using Tree Hierarchical Deep Convolutional Neural Network Optimized with Balancing Composite Motion Optimization Algorithm", Journal of Experimental & Theoretical Artificial Intelligence, 2023
- M.Annalakshmi, SMM Roomi, AS Naveedh, "A hybrid technique for gender classification with SLBP and HOG features", Cluster Computing, 1-10, 2018
- P Kalaivani, SMM Roomi, **M Annalakshmi**, "A Comprehensive Framework for Learning Events", The Online Journal of Distance Education and e-Learning 5 (3), 2017
- M Annalakshmi, SMM Roomi, SS Priya, "Gender recognition from face images using texture descriptors for human computer interaction", Journal of Chemical and Pharmaceutical Sciences 9 (3), 1231-1234, 2016.
- SMM Roomi, **M.Annalakshmi**, "Face detection using color and edge distribution", International Journal of Applied Engineering Research 10 (4), 9415-9423, 2015.
- JJ Priya, **M Annalakshmi**, R Ganesan, "FPGA Implementation of Low Power Image Scaling Processor using Bilinear Interpolation", Programmable Device Circuits and Systems 6 (5), 141-146, 2014
- SC Christabel, M Annalakshmi, MDP Winston," Facial feature extraction based on local color and texture for face recognition using neural network", International Journal of Science and Engineering Applications 2 (4), 78-82, 2013
- B.Aiswarya, M.Annalakshmi, "Gender Classification based on Principal Component Analysis and Linear Discriminant Analysis features with Sparse Representation", International Journal of Advanced Information Science and Technology (IJAIST), 2013

### 3. International Conference Presentation Details:

- Annalakshmi, M., V. Jenifer, N. Sharmily, and S. Soundarya. "Solar unplugged electric vehicle charging system." In AIP Conference Proceedings, vol. 3204, no. 1. AIP Publishing, 2025.
- Kumar, T.V., Karthick, R., Nandhini, C., Annalakshmi, M. and Kanna, R.R., 20. GaN
  Power HEMT-Based Amplifiers. Circuit Design for Modern Applications, 320, 2025
- M. Annalakshmi, M. J. Vishnu Kumar and S. Saffryn Timothy, "Machine Learning Based Stock Price Prediction Using Sentiment Analysis from News Articles," 2024 9th International Conference on Communication and Electronics Systems (ICCES), Coimbatore, India, 2024, pp. 998-1003, doi: 10.1109/ICCES63552.2024.10860183.

- Kalaivani Paramasivam, Mohamed Mansoor Roomi Sindha, Senthilarasi Marimuthu, Annalakshmi M, and Prakash P. 2025, "LW-Dehazer: Deep Learning for Dense and Non-Homogeneous Haze Removal", In Proceedings of the Fifteenth Indian Conference on Computer Vision Graphics and Image Processing (ICVGIP '24). Association for Computing Machinery, New York, NY, USA, Article 47, 1–11. https://doi.org/10.1145/3702250.3702297
- M. Annalakshmi, K.S Keerthana and Sowmiya Eswari P, "Emergency Vehicle Sound Classification for Dynamic Traffic Signal Control using Convolutional Neural Networks," 2024 International Conference on Sustainable Communication Networks and Application (ICSCNA), Theni, India, 2024, pp. 1362-1369, doi: 10.1109/ICSCNA63714.2024.10863989.
- Srinivasan V.A., **Annalakshmi M.**, Priya, C, "Innovations in Healthcare and Biotechnology Driven by Industry 5.0", in Utilizing Renewable Energy, Technology, and Education for Industry 5.0, IGI Global: Pennsylvania, PA, USA, 2024, pp. 258–274.
- JR Balashunmugam, MMR Sindha, **Annalakshmi Makkie**, UM Pandiyan, "Image enhancement techniques for fundus images-A review", AIP Conference Proceedings 2857 (1), 2023
- M.Annalakshmi, SMM Roomi, V.Karthik, "Automatic Extraction of Facial Regions using CLM for the Application of Face Recognition", International Journal of Innovative Technology and Exploring Engineering (IJITEE), 9(9), 264-268, 2020
- M Annalakshmi, SMM Roomi, MP Beham, "Estimation of Face Pose Orientation Using Model-Based Approach", Innovations in Electronics and Communication, Lecture Notes in Networks and Systems, Springer, 61-70, 2019
- M Annalakshmi, Dr.S.Vijayanand, Dr.R.Muthalagu, Dr.M.Ganesh Mani, "An approach to deep learning based on Discrete wavelet transform for the diagnosis of epilepsy", NeuroQuantology 20 (10), 8941-8955, 2022

#### 4. National Conference Presentation Details:

- The Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2024) at IIIT, Bangalore, Karnataka, 2024
- National Conference on Computer Vision Pattern Recognition Image Processing and Graphics – NCVPRIPG 2019 at KLE Technological University, Hubli, Karnataka, 2019
- The Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2016) at IIT, Guwahati, Assam, 2016
- "International Conference on Innovative Trends in Engineering, Science and Management (NICESM2016) at Noorul Islam University, Kumaracoil, 2016
- Workshop on Applications of Computer Vision, Graphics and Image Processing (WACIG 2014) at IISc, Bangalore, 2014

- "DOCTORAL SYMPOSIUM The Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2014) IISc, Bangalore, 2014
- "International Conference on Computational Intelligence and Communication (ICCIC2012)" at SKR Engineering College, Chennai, 2012
- National Conference on System Design and Information Processing (SDIP2012) at Excel College of Technology, Salem, 2012
- The Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2012) at IIT, Bombay, 2012
- National Conference on Advanced Communication Systems at Alagappa Chettiar College of Engineering and Technology, Karaikudi, 2005

## 5. Google Scholar report:

