

# Kathir College of Engineering

## Faculty Profile

Dr Ayyavoo Mithila Associate Professor Artificial Intelligence and Data Science		
<b>Qualification</b>	<b>M.E.,PhD.,</b>	
<b>Area of Specialization</b>	<b>Information and Communication Engineering</b>	
<b>Email</b>	<b>mithila@kathir.a.cin</b>	
<b>Mobile Number</b>	<b>9894716062</b>	
<b>Membership in Professional Bodies</b>	<b>IEEE – ID No. 91148634</b>	
<b>Total Experience in (Years) :16</b>		
<b>Industry</b>	<b>Academic</b>	
3 Years 6 months	Teaching: 7 Years 10 months	
	Research: 5 Years	
<b>Publication Details</b>		
<b>Number of Papers Published</b>	<b>Journal Publications</b>	<b>Conference Publications</b>
	<b>4</b>	<b>11</b>
<b>Journal Publications</b>		
1. Ayyavoo Mithila, A.Lavanya, A.R.Nithyashree, T.R.Mithra "Design of Efficient Low Power Flash ADC Using TIQ in 45 nm Technology", Indian Journal of Science & Technology, Vol:12, Issue:43, 2019. 2. Ayyavoo Mithila and Dr.Vijayakumari Valsalam, "Pulse width based CMOS subcircuits for Voltage mode Analog Neuron with 180nm technology", Asian Journal of Information Technology, 17: 114-118, 2018. 3. Ayyavoo Mithila and Dr.Vijayakumari Valsalam, "Dynamic signal characterizations and		

*simple applications of CMOS Miller compensated Amplifier using 180nm technology*", International Journal of Printing, Packaging and Allied Sciences, Vol:5, Issue 1:104-110, February 2017.

4. Ayyavoo Mithila and Dr.Vijayakumari Valsalam , "*Pulsed CMOS Neural Network Design in Subthreshold Region using Translinear Principle*", International Journal of Applied Engineering Research, Volume 10, Number 13(2015), pp.33053- 33064. (imp factor:1.8233) ISSN 0973-456.

#### **Conference Publications:**

1. Dawood Ibrahim H and Dr Ayyavoo Mithila, **Best Paper Award** "Deep audio classification using Tensorflow and Convolutional neural networks", 7<sup>th</sup> National Conference on intelligent information and computing technologies" CSE-RVSCET, March 17, 2023
2. Aruna Devi and Dr Ayyavoo Mithila, **First Prize** at DigiAvinya Symposium 2023 "Quantification of Bird Call using Tensor Flow & CNN", ECE-RVSCET, April 20, 2023
3. Gowtham, Ilakiyan and Dr Ayyavoo Mithila, "Filter Noise in Application logs", 7<sup>th</sup> National Conference on intelligent information and computing technologies" CSE-RVSCET, March 17, 2023
4. Daanish M, RenuShree and Dr Ayyavoo Mithila, "Autoscaling by forecasting model", 7<sup>th</sup> National Conference on intelligent information and computing technologies" CSE-RVSCET, March 17, 2023
5. Ramya Krishnan and Dr Ayyavoo Mithila, "Sentiment analysis using RStudio", ElectroKratz Symposium 2023, Karunya University, March 21, 2023
6. Oral presentation at IEEE International Conference on Control, Automation and Systems (ICCAS 2019), "Certain investigations on OTA using submicron technologies", Sri Eshwar College of Engineering, Coimbatore, March 15 and 16, 2019.
7. Oral presentation at 2nd International Conference on Electronics, Computer and Manufacturing Engineering (ICECME'2016), "*Analog Activation Function for CMOS Pulsed Neural Network Design using 180nm technology*", Singapore, May 12, 2016.
8. Oral presentation at International Conference on Advances in Science, Management and Engineering (ICASME 2015) organized by International Organization of Scientific Research and Development (IOSRD), "*CMOS Asynchronous Pulse Converter circuit for Voltage mode PWM Analog Neuron*", Chennai, December 26, 2015.
9. Oral presentation at International Conference on Intelligent Computing, Electronics Systems and Information Technology (ICESIT-15), "*Design of Synapse Multiplier for Analog Neuron using PWM Technique*", Kuala Lumpur, Malaysia, August 25-26, 2015.
10. Oral presentation at International Conference on Electrical, Instrumentation and Communication Engineering – Recent Trends and Research Issues ICE2RTRI-2015, "*Mathematical approximants for analysis of activation functions and their derivatives*" at Sri Krishna College of Technology, Coimbatore, January 2-3, 2015.
11. Oral presentation at IEEE International Conference on Human-Computer Interactions 2013, ICHCI'13, "*Analysis of Activation functions and their derivatives*" at Saveetha University, Chennai, 23 August, 2013.

<p><b>Research Interests</b></p>	<p><b>Research Interests include Analog VLSI Design, Machine Learning and Deep Learning</b></p> <p>Completed projects include:</p> <p>Mentored 14 Deep Learning and 12 Machine learning Mini Projects done in 2023</p>
<p><b>Other relevant achievements, awards and links:</b></p>	<p><b>Google scholar profile</b>  <a href="https://scholar.google.com/citations?user=PlcZTPMAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=PlcZTPMAAAAJ&amp;hl=en</a></p> <p><b>Consultancy</b></p> <ul style="list-style-type: none"> <li>• Pricol technologies – ChatPDF and ChatBot for HR</li> <li>• Pricol technologies - Platinum Partner for Coimbatore Marathon – Solved problem of Employee fitness data extraction and usage from Google fit data – 2023</li> <li>• Planar Investments, Chennai – Pattern recognition from Investment dataset of Customers</li> <li>• WeInvest Inc. Bangalore – Solved:</li> </ul> <p>A few topics in AI:</p> <ol style="list-style-type: none"> <li>1. Predicting at what times users are likely to respond to a marketing mail/whatsapp message</li> <li>2. Managing infrastructure scale through AI - autoscaling by predicting demand.</li> <li>3. AI to filter noise from application logs</li> </ol> <p><b>Lecture delivered</b></p> <p>Delivered lecture on topic, <b>The humane side to Skill Building Engineers</b>, in the National Level World Record Daily Webinar Series, on 23-December, 2023. Organized by Shri Kumarwami Mahavidyalaya, Ausa, Dist. Latur, MS, India.</p> <p><a href="https://www.linkedin.com/posts/betkar-principal-india-a45aa928-dr-mithila-placement-director-kathir-college-activity-7144496860018253825-aEWm?utm_source=share&amp;utm_medium=member_android">https://www.linkedin.com/posts/betkar-principal-india-a45aa928-dr-mithila-placement-director-kathir-college-activity-7144496860018253825-aEWm?utm_source=share&amp;utm_medium=member_android</a></p> <p><b>Awards</b></p> <ol style="list-style-type: none"> <li>1. Dawood Ibrahim H and Dr Ayyavoo Mithila, Best Paper Award “Deep audio classification using Tensorflow and Convolutional neural networks”, 7<sup>th</sup> National Conference on intelligent information and computing technologies” CSE-RVSCET, March</li> </ol>

	17, 2023 2. Aruna Devi and Dr Ayyavoo Mithila, First Prize at DigiAvinya Symposium 2023 "Quantification of Bird Call using Tensor Flow & CNN", ECE-RVSCET, April 20, 2023
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