Faculty Profile



Dr. P. Muthu Krishnammal, M.Tech., Ph.D.Professor / ECE

HIGHLIGHTS:

• Number of Journal Publications: 38

• H-Index: 5

• Project Funding Received: Nil

Patents Published: 5Patents Granted: 2

PROFESSIONAL LINKS:

• Scopus ID: <u>57226547455</u>

• Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=57226547455

• Google Scholar ID: https://scholar.google.com/citations?user=W8sDJfcAAAAJ(Google scholar)

- Anna University Faculty ID:
- AICTE Faculty ID:
- Anna University Supervisor ID:
- LinkedIn: https://www.linkedin.com/in/dr-muthukrishnammmal-perumal-28283ab2/

PROFESSIONAL BACKGROUND:

• Teaching Experience till date: 18 years

• Industrial Experience: Nil

INTERNATIONAL EXPOSURE:

Nil

AREA OF SPECIALIZATION:

• Bio-medical Image Processing

- Machine Learning
- VLSI and Embedded Systems

Ph.Ds AWARDED WITH DETAILS:

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time

Ph.Ds GUIDING:

Full Time Scholars: 1Part Time Scholars: 0

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

Applied

PATENTS PUBLISHED/GRANTED:

- Enhancing Elderly and Cognitive Impairment Care: An Intelligent Humanoid Robot Companion in 2024
- Electronic Glove for Women Safety, **Design No.:** 385772-001; **Filed on:** 8/05/2023 (**In Force Until:** 08/05/2033)
- IoT Based Health Monitoring Device; **Status:** Design Application Examination Report has been Generated; Filing Date-**25/01/2022**
- Smart Clothes for Security Forces in Borders to Track Their Health Records Instantly **Application No.:** 202141016358; **Status:** Published on 16/04/2021
- Multistage Filtration of Industrial Waste Water with Automated Supervisory Control Through IoT Cloud Computing Sensor Network System (ICCSNS)
 Status: Published on 08/01/2021

COURSES CERTIFIED:

- Completed NPTEL course <u>Computer Networks and Internet Protocol</u> in Jan -Apr-2022
- Completed NPTEL course Deep Learning in Jan-Apr 2025
- Faculty Development Programme on Quantum Technologies & Applications, February 28 - March 22, 2025 (40 hours, funded by MeitY and endorsed by DST - NQM / AICTE / UGC)
- MHRD sponsored GIAN course on "Understanding Nanotechnology and Engineering Nano

materials for Diverse Technological Applications" from 18/12/2017 to 22/12/2017 at the Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli.

 GIAN course on "Vogue Technologies on 5G &5G+ Communication and Vehicular Technology" from Dec 26 th 2017 to 2nd Jan 2018 at the Department of Electronics and Communication Engineering, National Institute of Technology, Tiruchirappalli

ACHIEVEMENTS AND AWARDS:

- Received **School First Rank Holder** award in Class X (1999)
- Received **"Excellence for Women in R & D"** Award in *International Conference on Emerging Trends in Science, Engineering & Management 2021*
- Received Research Award for Publications for the academic year 2023–2024 from VIT-AP University

SPECIAL SESSIONS DELIVERED:

- Session talk on "Ethical and Responsible AI in R&D" in five days Faculty
 Development Program (EDP) on AI'S ROLE IN MODERN RESEARCH & DEVELOPMENT held
 at SREE SAKTHI ENGINEERING COLLEGE, An Autonomous Institution (Coimbatore) from 30st
 June 2025 to 5th July 2025.
- Session talk on "Design Thinking for Entrepreneurs: Unleashing the Startup Spirit" in five days Executive Development Program (EDP) on Startup: Unleashing the Entrepreneurial spirit, held at VIT-AP University from 1st July 2025 to 5th July 2025.
- Session talk on "Research and Publication Ethics" (20-03-2025), in five days National FDP on Effective Teaching in the 21st Century: Strategies and Tools for Success, organized by ECE Department, JP College of Arts and Science, from 17th March to 21st March, 2025.
- Session talk on "Technological Enablers of 6G" (08-04-2025) in Online Faculty Development Program (FDP) on *Perspectives of 6G towards Next Gen Communications*, organized by ECE Department, Sri Sairam Engineering College, Chennai, from 07-04-2025 to 11-04-2025.
- Invited talk on "Artificial Intelligence and Machine Learning: Supervised Algorithms", Anna University sponsored STTP at SRM TRP Engineering College (Jan 2024).
- Invited talk on "Quantum Teleportation", ATAL FDP on Advances in Quantum Computing, at Sri Krishna College of Technology, Coimbatore (Dec 2023).
- Invited talk on "Applications of Machine Learning in Medical Imaging", organized by RAAK College of Engineering & Technology, Puducherry on 17th July 2023.
- Presented a national-level webinar on "Emerging Technologies in Electronic Devices", organized by Trichy Engineering College, Tiruchirappalli on 06-10-2021.
- Presented a national-level webinar on "Artificial Intelligence and Machine Learning", organized by JP College of Arts and Science, Tenkasi on 5th June, 2021.
- Presented a webinar on "VLSI Packaging", in a webinar series on Financial Planning and Engineering organized by Sathyabama Institute of Science and Technology, Chennai on 11th June 2020.
- Presented a webinar on "Electronic Packaging in VLSI", in ROWS-2020 webinar series on 06th May 2020, organized by RAAK College of Engineering & Technology, Puducherry.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Faculty Development Programme on Quantum Technologies & Applications,
 February 28 March 22, 2025 (40 hours, funded by MeitY and endorsed by DST NQM / AICTE / UGC).
- Five days online FDP on Recent Trends in VLSI and MEMS, June 3–7, 2024, conducted by IIIT-Kottayam.
- "3rd One Week Workshop on VLSI Device, Circuit and System Design Tools (Online)", June 27 July 3, 2023, VIT-AP University.
- Designing Edge AI Applications using STMicroelectronics AI Ecosystem, February 14–18, 2023.
- Six Days Virtual Workshop on "Research Opportunities in Semiconductor Materials and Devices (ROSMD-2022)", October 19–24, 2022, SRM Institute of Science and Technology.
- Recent Trends in Optimization Techniques for Challenging Engineering Applications, October 21–27, 2022.
- "2nd One Week International Workshop on Signal Processing using Machine Learning: Applications & Hands-on (Online)", August 31 – September 6, 2022, VIT-AP University.
- "2nd One Week Workshop on VLSI Device, Circuit and System Design Tools", June 23–29, 2022, VIT-AP University.
- Grant and Funding Project Proposal Writing, One-day workshop on May 29, 2022.
- "Biomedical Antennas", March 21–26, 2022, Karunya Institute of Technology and Sciences, Coimbatore.
- "IoT & Applications (Smart Systems)", February 14–25, 2022, organized under MeitY scheme at NECG.
- Five days online workshop on "FPGA Based SoC Design Targeted for Implementing AI/ML Algorithms", December 27–31, 2021, NIT Trichy.
- Two days online workshop on "Ansys for High Frequency Electromagnetics",
 September 23–24, 2021, NIT Andhra Pradesh & ARK Infosolution Pvt. Ltd.
- FDP on "Applied AI & Deep Learning in Healthcare Data Analysis", August 9–23, 2021, conducted by EduxLabs India in association with E-cell IIT Hyderabad.
- Self-sponsored STTP on "VLSI Architectures for DSP Systems", June 14–18, 2021, NIT Calicut.
- ATAL FDP on "Sensors Technology", February 15–19, 2021, Mizoram University.
- FDP on "Deep Learning and Its Applications", June 17–22, 2020, E & ICT Academics, NIT Patna and Electronics India.
- FDP on "Artificial Intelligence Using Deep Learning and Machine Learning", November 26–30, 2018, NIT Trichy.
- Workshop on "Artificial Intelligence and Deep Learning", September 14–16, 2018,
 Ramco Institute of Technology, by LeadingIndia.ai and Bennett University.
- Two-day workshop on "Recent Developments in NDT and Materials (RDNDT&M16)", December 1–2, 2016, Tagore Engineering College, Chennai.
- Three-day National Workshop on Engineering Applications of MATLAB, January 8– 10, 2014, Sathyabama University.

- Three-day National Workshop on Image Processing Using MATLAB Level-1, January 9–11, 2013, Sathyabama University.
- One-day National Workshop on Image Processing Using MATLAB, April 2012, Sathyabama University.
- Workshop on Recent Trends in VLSI-based DSP, May 2011, Anna University, Madurai campus.
- Workshop on Research Methods, January 2011, Anna University, Chennai, conducted by IEEE & PCS.

PROFESSIONAL MEMBERSHIPS:

- IEEE (Institute of Electrical and Electronics Engineering) (Membership Number: 98766938)
- TSI- Telemedicine Society of India (Life Membership-LM0800)

OTHER DETAILS (If any): (Books Authored)

• Mr. A. Rizwan Basha, Mrs. D. Asha, Mr. Caleb S, Dr. P. Muthu Krishnammal

Title: Fundamentals of AI, IoT and Machine Learning **Publisher:** Scientific International Publishing House

ISBN: 978-93-5757-921-6 (Oct'2023)

Link to Book: https://sipinternationalpublishers.com/product-

detail.php?PID=MTU4NA==

• Dr. P. Muthu Krishnammal, Dr. J. Thimmia Raja, Dr. T. Dhiliphan Rajkumar,

Dr. Pavithra G., Dr. T.C. Manjunath

Title: Image Processing and Machine Vision

First Edition: March 2022 Publisher: Notion Press ISBN: 9798886295979

Link to Book: https://notionpress.com/in/read/image-processing-and-machine-

vision/image-processing-and-machine-vision/

• Dr. Srimathi J., Dr. P. Muthu Krishnammal, Dr. A. Prakash, Dr. Ranjan Kumar

Mohapatra

Title: Machine Learning and Algorithms

First Edition: December 2021 **Publisher:** Notion Press **ISBN:** 9798885466837

Link to book: https://notionpress.com/in/read/machine-learning-and-

algorithms/