

Mrs.R.Nancy Deborah, M.E

Assistant Professor, Department of IT

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Educational Qualification:

- Completed **M.E** in Computer Science and Engineering(2014-2016) from Anna University, College of Engineering Guindy, Chennai with **8.6 CGPA (First Class With Distinction)**
- Completed **B.E** in Computer Science & Engineering(2010-2014) from Velammal College of Engineering and Technology, Madurai with **8.8 CGPA(First Class With Distinction, university rank 15)**
- Completed Higher secondary from S.D.A Matriculation Higher Secondary School, Madurai with **90.4%**.
- Completed High School from S.D.A Matriculation Higher Secondary School, Madurai with **93.58%**.

Experience in Years: 7 Years

Employment History: Assistant Professor at Velammal College of Engineering and Technology.

Interested Research Areas:

- Artificial Intelligence
- Machine Learning
- Data Science and Big DataAnalytics

Scholarships and Awards received:

- Anna university rank holder with 15th rank in B.E .
- **GATE SCHOLAR** with All India Rank 4462 in GATE 2014.
- Certified with Business English Certificate vantage, Council of Europe level B2, with **grade C**, conducted by **University of Cambridge**.
- Has secured **A+ grade** in the Technical Assessment Test conducted by IndiaCan Education Private Limited, Madurai.
- **Qualified the UGC-NET** for eligibility for Assistant Professor held on 08-07-2018 in the Subject Computer Science and Application.

Publications Details:**1. INTERNATIONAL JOURNALS:**

- Paper titled “**An Intelligent Deep learning Based Animal Detection System**” has been published in “**International Journal of Scientific Research in Engineering and Management (IJSREM)**” , Volume: 06 Issue: 06 | June – 2022 ISSN: 2582-3930

- Paper titled **“Sentiment Analysis and Machine Learning Algorithm Implementation on Health Care System”** has been published in **“International Research Journal of Engineering and Technology (IRJET)”** e-ISSN: 2395-0056 p-ISSN: 2395-0072 Volume: 08 Issue: 05 | May 2021 page no. 3466-3471
- Paper titled **“Quantification of Parasitemia using Machine Learning Algorithm for Malaria Parasite Detection”** has been published in **“International Journal of Innovative Research in Computer and Communication Engineering”**, Volume-8 Issue-3 March 2020, DOI: 10.15680/IJRCCE.2020. 0803057, pages: 620-624

2. SCOPUS INDEXED JOURNALS:

- Paper titled **“Product Recommendation System using Opinion Mining”** has been published in **“International Journal of Engineering Trends and Technology”**, Volume-67 Issue-3 March 2019, DOI: 10.14445/22315381/IJETT-V67I3P212 , pages: 66-69 and indexed in Scopus.

3. BOOK PUBLICATIONS:

- A Chapter titled **“Delineating the Healthcare 5.0”** in the book titled **“Edge AI for industry 5.0 and Healthcare 5.0 Applications: The Key Motivations, Enabling Technologies, and Security Challenges”** has been published by CRC Press and indexed in scopus(<https://doi.org/10.1201/9781003442066>), March 2025.
- A Chapter titled **“The Fusion of IoT, AI, Edge Cloud, and Blockchain”** in the book titled **“Edge AI for industry 5.0 and Healthcare 5.0 Applications: The Key Motivations, Enabling Technologies, and Security Challenges”** has been published by CRC Press and indexed in scopus(<https://doi.org/10.1201/9781003442066>), March 2025.
- A Chapter titled **“Block chain Frameworks for Healthcare Data Storage and Exchange”** in the book titled **“Cybersecurity on Healthcare Application”** has been published by CRC Press and indexed in scopus(<https://doi.org/10.1201/9781032711379>), February 2025
- A Chapter titled **“Artificial Intelligence and Security Management in Digital Healthcare Using Fifth Generation Communications”** in the book titled **“Cybersecurity on Healthcare Application”** has been published by CRC Press and indexed in scopus(<https://doi.org/10.1201/9781032711379>), February 2025
- A Chapter titled **“IQ Bot for Intelligent Document Process and Mail Processing”** in the book titled **“Hyperautomation for Next Generation Industries”** has been published by Wiley and indexed in scopus(<https://doi.org/10.1002/9781394186518.ch6>), September 2024.
- A Chapter titled **“Hyperautomation for automating the customer service operations”** in the book titled **“Hyperautomation for Next Generation Industries”** has been published by Wiley and indexed in scopus(<https://doi.org/10.1002/9781394186518.ch8>), September 2024.
- A Chapter titled **“Application of Hyperautomation in Insurance and Retail Industries”** in the book titled **“Hyperautomation for Next Generation Industries”** has been published by Wiley and indexed in scopus(<https://doi.org/10.1002/9781394186518.ch11>), September 2024.

- A Chapter titled **“Machine Learning Algorithms for Natural Disasters”** in the book titled **“Internet of Things and AI for Natural Disaster Management and Prediction”** has been published by IGI Global and indexed in **scopus** (DOI: 10.4018/979-8-3693-4284-8.ch009), March 2024.
- A Chapter titled **“Complications in Natural Disasters”** in the book titled **“Internet of Things and AI for Natural Disaster Management and Prediction”** has been published by IGI Global and indexed in **scopus** (DOI: 10.4018/979-8-3693-4284-8.ch003), March 2024.
- A Chapter titled **“IoT Devices for Natural Disasters”** in the book titled **“Internet of Things and AI for Natural Disaster Management and Prediction”** has been published by IGI Global and indexed in **scopus** (DOI: 10.4018/979-8-3693-4284-8.ch007), March 2024.
- A Chapter titled **“Healthcare Technologies for Pregnant Women”** in the book titled **“Predicting Pregnancy Complications Through Artificial Intelligence and Machine Learning”** has been published by IGI Global and indexed in **scopus** (DOI: 10.4018/978-1-6684-8974-1.ch004), September 2023.
- A Chapter titled **“IoT Devices for Healthcare”** in the book titled **“Technological Tools for Predicting Pregnancy Complications”** has been published by IGI Global and indexed in **scopus** (DOI: 10.4018/979-8-3693-1718-1.ch002), September 2023.
- A Chapter titled **“Wearable Sensors and AI Algorithms for Pregnant Women”** in the book titled **“Technological Tools for Predicting Pregnancy Complications”** has been published by IGI Global and indexed in **scopus** (DOI: 10.4018/979-8-3693-1718-1.ch007), September 2023.

4. INTERNATIONAL CONFERENCES:

- Paper titled **“Machine Learning Based Approach Using Hand Gestures for Mouse and Video Control”** has been published in **IEEE**(DOI: 10.1109/ICSES63760.2024.10910461), March 2025 and **indexed in scopus**.
- Paper titled **“Green options for milk packaging using intelligent packaging”** has been published in **IEEE**(DOI: 10.1109/AECE62803.2024.10911797), March 2025 and **indexed in scopus**.
- Paper titled **“Waste Segregation using IoT and Machine Learning”** has been published in **IEEE**(DOI: 10.1109/AECE62803.2024.10911797), March 2025 and **indexed in scopus**.
- Paper titled **“Augmenting Security Systems with Sign Language Recognition Using Deep Learning”** has been published in **IEEE**(DOI: 10.1109/ICSES63760.2024.10910339), March 2025 and **indexed in scopus**.
- Paper titled **“An Intelligent Recommendation of Organ Transplantation System Machine Learning for Donor Recipient Matching”** has been published in **IEEE**(DOI: 10.1109/ICSCNA63714.2024.10864358), February 2025 and **indexed in scopus**.

- Paper titled **“A Repository based Criminal Identification - Evolution in Forensics using Deep Learning”** has been published in **IEEE**(DOI: 10.1109/InC460750.2024.10649131), March 2024 and **indexed in scopus**.
- Paper titled **“An Efficient Health Insurance Prediction System using Machine learning”** has been published in **IEEE**(DOI: 10.1109/ICSES60034.2023.10465422), March 2024 and **indexed in scopus**.
- Paper titled **“Military Aircraft Detection using Deep Learning”** has been published in **IEEE**(DOI: 10.1109/ICSES60034.2023.10465334), March 2024 and **indexed in scopus**.
- Paper titled **“An Efficient Face Recognition based Attendance System”** has been published in **IEEE**(DOI:10.1109/AECE59614.2023.10428141), February 2024 and **indexed in scopus**.
- Paper titled **“Sentiment Analysis and Machine Learning Algorithm Implementation on Flipkart Product Customer Reviews”** has been published in **IEEE**(DOI: 10.1109/ICACTA58201.2023.10393161), January 2024 and **indexed in scopus**.
- Paper titled **“An Efficient Loan Approval Status Prediction Using Machine Learning”** has been published in **IEEE** (DOI: 10.1109/ICACTA58201.2023.10392691), January 2024 and **indexed in scopus**.
- Paper titled **“An Effective Approach Using Machine Learning for Fall Prediction”** has been published in **IEEE**(DOI: 10.1109/ICSCC59169.2023.10334969), December 2023 and **indexed in scopus**.
- Paper titled **“Scrutinization and Abstraction of Unstructured Electronic Health Records using Natural Language Processing and Deep Learning”** has been published in **IEEE** (DOI: 10.1109/InC457730.2023.10262918), September 2023, and **indexed in scopus**.
- Paper titled **“Heart Disease Prediction using Ensemble Model”** has been published in **IEEE** (DOI: 10.1109/ICAIA57370.2023.10169687), July 2023, and **indexed in scopus**.
- Paper titled **“Detecting Parkinson's Disease using Machine Learning”** has been published in **IEEE** (DOI: 10.1109/ICECONF57129.2023.10083581), January 2023, and **indexed in scopus**.
- Paper titled **“A Comparative Study on the Performance of FPGA Implementations of High-Speed Single-Precision Binary Floating-Point Multipliers”** has been published in **IEEE** (10.1109/ICSSIT46314.2019.8987800), February 2020 and **indexed in scopus**.
- Paper titled **“A Context-Aware Approach based Web Service Recommendation”** has been published in **IEEE** (10.1109/AEEICB.2016.7538270), August 2016 and **indexed in scopus**.

5. PATENTS:

- Published a Patent titled “**Automated Management of Healthcare Resources using Artificial Intelligence and Machine Learning**” under The Patent Office Journal No. 25/2024 Dated 21/06/2024

6. ONLINE COURSES

- Successfully completed NPTEL course on “Python for Data Science” with “Elite” during Jan-Feb 2023 Exam
- Successfully completed NPTEL course on “Joy of Computing with Python” with “Elite+Silver” during Jul-Oct 2023 Exam