

Keerthana Manikandan

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Personal Information

Full Name: Keerthana Manikandan
Date of Birth (DD/MM/YYYY): 06/01/2004
Nationality: Indian
Passport: Y 4 3 7 9 5 7 7

Education

Bachelor of Engineering in Electronics and Communication Engineering
Kamaraj College of Engineering and Technology, Anna University,
Near Virudhunagar, Tamil Nadu, India.

CGPA: 8.02/10
Successfully completed a four-year program in Electronics and Communication Engineering with a strong foundation in core areas such as Digital Electronics, Signal Processing, Communication Systems, and Embedded Technologies.
November 2021 – Apr 2025

Senior Secondary Education
Velammal Vidyalaya, CBSE, Madurai, Tamil Nadu, India.

Mark Percentage: 83.6%
Completed Senior Secondary Education (12th) under CBSE in the PCMC stream (Physics, Chemistry, Mathematics, Computer Science)
Jun 2020 – Aug 2021

Secondary School Education
Velammal Vidyalaya, CBSE, Madurai, Tamil Nadu, India.

Mark Percentage: 85%
Completed Secondary Education (10th) under CBSE covered general subjects.
Jun 2018 - May 2019

Internships

Embedded System Engineer
Totoys AI Private Ltd (CEDI Incubated startup, NIT Trichy)

- Designed and developed an embedded system for a robotic project, working with microcontrollers and programming languages like C and Python.
 - Collaborated with the hardware team to troubleshoot and resolve technical issues. Applied machine learning and deep learning techniques to enhance system functionality.
 - Conducted code reviews, testing procedures to ensure software quality, performance, and reliability.
- Jun 2024 - Aug 2024**

Web Development Intern
Futurik Technologies, Madurai, Tamil Nadu, India.

- Completed a one-month internship gained a solid understanding of HTML, CSS, and JavaScript while assisting in the development of responsive web applications using frameworks like Bootstrap and React.
- Jun 2023 - Jul 2023**

In-Plant Training

BSNL Telecommunication, Madurai, Tamil Nadu, India.

- Completed an 8-day in-plant training program that provided valuable industrial exposure and insights into emerging technologies.
- The sessions were focused on core subjects related to Electronics and Communication Engineering.
- Collaborated with industry professionals to understand the real-world applications of theoretical concepts, enhancing both technical knowledge and practical skills.

Dec 2022 - Dec 2022

Project work

Project Title: Design and Implementation of an Unmanned Remote - Controlled Coconut Tree Climbing and Harvesting Robot and Performance Evaluation in Field

- Developed an unmanned robotic system capable of remotely climbing coconut trees and harvesting coconuts, aimed at addressing labor shortages and ensuring safety in agricultural practices.
- The robot features a mechanically stable climbing mechanism, a motorized cutting arm for harvesting, and a wireless control interface.
- Field performance evaluations demonstrated its effectiveness in real-time agricultural environments, confirming its reliability, efficiency, and scalability for rural deployment.

Apr 2025

Publication: Participated and Presented the paper in the International Conference on Innovation of Materials, Science and Engineering Technology (ICIMSET - 2025), organized by the Department of Research and Development in collaboration with ICT Academy, MIT Square (London), IETE Student Forum, and Dambi Dollo University (Ethiopia) on 28th February 2025.

Project Title: Expectant Mother's Healthcare - Design and evaluation using IoT

- Designed and developed an IoT-enabled healthcare monitoring system to support expectant mothers by continuously tracking vital health parameters such as heart rate, blood pressure, and temperature.
- The system provides real-time data transmission to healthcare providers, enabling early detection of potential risks and timely medical intervention. Conducted thorough evaluation of system accuracy, reliability to ensure effective remote maternal care.

Apr 2024

Skills and Certifications

- Programming Languages: Python, C, MATLAB
- Tools & Software: MATLAB, Xilinx, Arduino
- Core Technical Skills: VLSI Design, Digital Electronics, Signal Processing, Embedded Systems

AWS Cloud Partitioner (Certified)

Proficient in AWS data partitioning techniques to optimize system performance. Configured and managed services to handle large-scale data distribution and scalability.

Feb 2025

IoT using LoRaWAN Technology Certified by Enthru Technology

Learned real-time smart application development using LoRaWAN architecture, connectivity, and data transmission.

Aug 2023

IoT using Arduino and Cloud Certified by Pantech E-learning

Built IoT projects integrating Arduino with cloud platforms. Gained practical knowledge of Wi-Fi, Bluetooth, and MQTT protocol-based device communication.

Jan 2023

Language Proficiency

English – Proficient

IELTS Academic – Overall Band: 6.5

Test date: 26 April 2025

Extracurricular Activities & Volunteer Work

Student Coordinator – ELECCY'2K25 (2025)

National-level Technical Symposium, Kamaraj College of Engineering and Technology

- Led and coordinated a team of volunteers for planning and execution of the national-level technical symposium.
- Managed event scheduling, logistics, and guest coordination.
- Developed communication and problem-solving skills under time-bound conditions.

Volunteer – College Cultural and Technical Fests

- Contributed to the smooth execution of cultural and technical events by assisting in event setup, registrations, and on-ground coordination.
- Worked collaboratively with faculty and student teams to ensure timely completion of tasks.

Organized workshops or webinars

- Coordinated and promoted student development programs and webinars related to electronics, IoT, and emerging technologies.
- Managed registrations, resource person communication, and session logistics.

Participant – Inter-college Paper Presentations & Competitions

Represented the college in technical paper presentations and competitions at inter-college fests, gaining exposure to diverse engineering topics and peer networks.