JANANE

BIOMEDICAL ENGINEER



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9443947248 Salem, Tamilnadu

Janane Shanmugam 10/01/2005

SKILLS

Technical Skills

- Medical device principles and performance
- Medical device Specification and features
- Medical Device hardware assembly
- Medical device application and operation
- Technical Documentation Basics
- Medical Device Regulation frameworks (EU MDR (2017/745), US FDA, CDSCO)
- ISO 13485 - Quality Management System
- ISO 14971 - Risk Management System
- IEC 60601-1 Electrical Safety Testing

Professional Skills

- Teamwork
- Time Management
- Leadership
- Effective Communication
- Flexibility
- Adaptability

LANGUAGES

- English
- Tamil

INTERNSHIP

Hospital Training - Shanmuga Hospital Ltd.,

05/07/2024 – 14/07/2024

Gained practical exposure to hospital operation theatres and patient care practices.

OBJECTIVE

An emerging Biomedical Engineer with a strong passion for healthcare innovation, medical instrumentation and technology-driven solutions. Committed to continuous learning and contributing to the future of biomedical advancements.

EDUCATION

B.E BIOMEDICAL ENGINEERING

Velalar College of Engineering and Technology

2022 – 2026 | CGPA - 8.89

HSC

SRK Matriculation Higher Secondary School

2022 | Percentage - 87%

SSLC

SRK Matriculation Higher Secondary School

2020 | Percentage - 85%

TRAINING

Advanced Training in Biomedical Applications at Harvey Biomedical (JANUARY 2026- MARCH 2026)

Completed Advanced Training in Biomedical Applications at Harvey Training Institute, gaining exposure to a wide range of hospital and diagnostic biomedical equipment. The training focused on understanding the operation and applications of commonly used medical devices in clinical environments. This program helped build a strong practical foundation in biomedical equipment and healthcare technology.

- **Patient Monitor** – Comen Star 8000E
- **Fetal Monitor** – Comen Star 5000E
- **Autoclave (B-Class)** – Confidential Sterline+,
- **Electrosurgical Unit (ESU)** – Erbe Vio 300S
- **Dental X-Ray System (RVG/PSP)**
  PSP scannner - Fussen
  RVG - Rextar LCD
- **Infusion Pump** - Akas Infumax
- **Syringe Pump** - Smiths Medical Graseby 2100
- **Semi-Automatic Biochemistry Analyzer** - Trivitron healthcare labmate
- **Defibrillator** - Nihon Kohden, Cardiolife
- **ECG** - Nihon Kohden Cardiofax
- **Hematology Analyser** - Horiba Microsemi CRP
- **Electrolyte Analyser** - Horiba Yumizen 100
- **Ventillator**

Value Added Course - KAV biomedical equipment training and education
18/08/2024 - 23/08/2025

Gained knowledge of regulatory pathways, compliance requirements and documentation practices in the medical device industry.

MEMBERSHIPS

Secretary
TECHMEDICA Club, Department of Biomedical Engineering
2025 – 2026

Executive Member
IEEE EMBS Student Branch
2023

CERTIFICATES

Typewriting in English

Achieved First Class with Distinction in Junior Grade in 2024 and Senior Grade in 2025 Typewriting in English.

Project Presentation - 2025

Secured second prize in a Project Presentation held at SNS College for project "Homeostatic Temperature Regulation System in Garments".

IEEE Paper Selection – 2026

Project titled “Cold Atmospheric Plasma Therapy for Antimicrobial Applications” was selected as an IEEE conference, demonstrating innovation and alignment with academic research standards.

PROJECTS

Cold Atmospheric Plasma Therapy using Ambient Air for Antimicrobial Applications - 2026

Developed a portable device to control microbial growth using ambient air. The system demonstrated effective reduction of harmful bacteria within a short exposure time. The project identified applications in wound care, medical sterilization, and infection control. It highlighted the potential of plasma-based solutions in improving healthcare safety.

Homeostatic Temperature Regulation System in Garments - 2025

Developed a wearable smart garment integrated with temperature sensors and microcontroller-based control for thermal comfort. The system simulated homeostatic temperature regulation by adapting to environmental and body temperature variations, demonstrating applications in wearable healthcare and smart textiles.

DECLARATION

I hereby declare that all the information provided above is true and correct to the best of my knowledge and belief.

Signature