

# LAVANYA SRINUVASAN

Biomedical Engineer – Medical Devices & Clinical Systems

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**Location:** Al Aneeqa Tower, Al Nahda, Sharjah, UAE

**Visa Status:** Spouse Visa-No Sponsorship Required

**Availability:** Available Immediately



## ABOUT ME

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Biomedical Engineer with 2+ years of hands-on R&D experience developing safety-critical software for ICU ventilators and patient monitoring systems at Skanray Technologies. Proficient in C++ and Python with deep expertise in real-time UI development, V&V testing, and regulatory compliance aligned with **IEC 60601**, **ISO 13485**, and **ISO 14971** standards. MTech Biomedical Engineering Silver Medalist. Lean Six Sigma Black Belt certified. Based in Sharjah on a Spouse Visa — no employer sponsorship required, available to join immediately.

## PROFESSIONAL EXPERIENCE

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### [Skanray Technologies – Mysore, India](#)

Aug 2023 – April 2026

#### **Medical Device Software Developer – Research and Development**

- Designed and maintained C++ user interfaces for ICU ventilators (Respiro Turbo) and next-generation patient monitors (i10 & i12) using a proprietary medical UI framework, meeting IEC 60601 usability and safety requirements
- Integrated real-time backend data pipelines by interfacing ventilators with VT650 Flow Analyzer, ambient light sensors and proximity sensors, enabling accurate live clinical data visualization
- Collaborated and worked along with Verification & Validation team across software testing, debugged UI issues, managed test protocols, and supported regulatory submission documentation
- Developed a PDF viewer application using the Poppler library, integrated via D-Bus into the ventilator system, enabling in-device access to the user manual, improving clinical usability
- Contributed to product design reviews and technical documentation for regulatory submissions (design history files, usability reports)
- Collaborated in a regulated R&D environment with firmware, QA, and systems teams across the full product development lifecycle

## TRAINING & INTERNSHIP

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### **Trainee**

Aug 2023 – Feb 2024

#### [Deshila Technology Research Institute – Mysore, India](#)

- Developed biometric display interfaces using C/C++ and embedded systems (STM32)
- Focused on hardware-software integration and UI refinement for display-based embedded products

### **Intern**

May 2020

#### [Emglitz Technologies – Coimbatore, India](#)

- Developed a machine learning algorithm in Python/MATLAB to detect and localize brain tumors in MRI images
- Gained hands-on experience in medical image processing and practical application of ML in clinical diagnostics

## Basic & Advanced Biomedical Engineering Training

June 2018 & June 2019

GE Healthcare and SNR Centre for Academic Excellence for Healthcare Technologies

- Completed foundational biomedical engineering training on principles, operation, and maintenance of core medical equipment categories including ECG, patient monitoring, and life support systems
- Gained working knowledge of ultrasound (including LCS), X-ray systems, and CT scanners covering operation, image acquisition, and safety protocols

## Hospital Training

November-December 2018 & May 2019

Sri Ramakrishna Hospital - Coimbatore, India

- Completed training programs covering all major clinical departments of a large multi-specialty hospital
- Trained on hands-on operation, calibration, and routine maintenance of medical equipment across departments including ICU, radiology, cardiology, OT, and general wards

## EDUCATION

### Master of Technology (M.Tech) – Biomedical Engineering (Silver Medalist)

Amrita Vishwa Vidyapeetham, Coimbatore, India • 2021 – 2023

### Bachelor of Engineering (B.E.) – Biomedical Engineering

Sri Ramakrishna Engineering College, Coimbatore, India • 2017 – 2021

## PROJECTS

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- **Developing User Interface for Turbine-based Ventilator – Skan Respiro Turbo** (Skanray Technologies)
- **Developing User Interface for Next Generation Patient Monitoring System – i10 & i12** (Skanray Technologies)
- **Improving the Performance of ECG-based Sleep Apnea Screening System using Signal Decomposition and Decision Fusion** (MTech Project Work)
- **IoT-Based Ambulance Alert System for Geriatric People** (B.E. Project Work)

## TECHNICAL SKILLS

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**Programming:** C++, C, Python, Embedded C

**UI & Frameworks:** GTKmm 3.0, Proprietary Medical UI Framework

**Embedded & Tools:** STM32CubeIDE, Eclipse

**Operating Systems:** Linux, Windows

**Standards:** IEC 60601, ISO 13485, ISO 14971, Medical Device Usability (IEC 62366)

**Domain Knowledge:** Medical Devices, V&V Testing, Regulatory Documentation

**Certifications:** Lean Six Sigma (Black Belt), Machine Learning & Deep Learning, Artificial Intelligence for Biomedical Signal and Image Processing.

## LANGUAGES KNOWN

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English, Hindi, Tamil, Telugu, Kannada

## PERSONAL INFORMATION

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**Passport number:** R7487169 • **Availability:** Immediate • **Visa Status:** Spouse Visa (201/2026/3075578) – No Sponsorship Required.