

SENTHIL PRAKASH K

Biomedical Engineer

Chennai | +91-63691 66971 | senthilprakash306@email.com | [linkedin.com/in/senthilprakash-90b4533b3](https://www.linkedin.com/in/senthilprakash-90b4533b3)

PROFILE SUMMARY

Biomedical Engineering graduate with knowledge of biomedical instrumentation, medical devices, healthcare technologies, and clinical workflows. Completed hospital internship and academic projects focused on healthcare innovation and data-driven solutions. Proficient in data analysis, problem-solving, and technical documentation, with strong communication and teamwork skills. Passionate about contributing to biomedical engineering, clinical engineering, and healthcare technology through continuous learning and innovation.

EDUCATION

B.Tech in Biomedical Engineering

2022 – 2026

Dr. MGR Educational and Research Institute

- CGPA: 8.3/10
- Presented technical papers at college symposiums.
- Coordinated departmental technical events.
- Participated in inter-college technical competitions.

Higher Secondary Certificate (HSC)

2016 – 2022

C.S.I. Bishop Corrie A.I Hr. Sec. School

- Scored 67% in Higher Secondary examinations
- Active participant in various inter-school sports events

ACADEMIC PROJECT

Lung Cancer Detection System

2025

- Developed a non-invasive lung disease screening system using breath biomarkers to enable early, low-cost disease detection.
- Achieved over 95% classification accuracy by training and tuning an XGBoost model on medical datasets.
- Designed a low-cost clinical decision support tool to improve early-screening accessibility in resource-limited settings.
- Deployed the trained model as a Flask web application with a user-friendly interface for real-time predictions.

TECHNICAL SKILLS

- **Programming & ML:** Python, Machine Learning, Data Analysis
- **Web & Deployment:** Flask, Web Application Deployment
- **Biomedical:** Equipment Calibration & Preventive Maintenance, Diagnostic & Monitoring Devices, Clinical Workflow & Compliance Documentation
- **Methodologies & Tools:** Agile/Scrum, Cloud Computing Fundamentals
- **Soft Skills:** Analytical Problem-Solving, Team Collaboration, Leadership

PROFESSIONAL EXPERIENCE

Biomedical Engineering Intern

2025 – 2026

MGM Health Care

- Assisted in preventive maintenance and calibration of biomedical equipment, supporting consistent operational efficiency.
- Observed and documented troubleshooting procedures for diagnostic and monitoring devices, building practical technical insight.
- Supported equipment documentation and compliance processes as part of hospital quality assurance measures.
- Gained direct exposure to hospital biomedical workflow systems, strengthening understanding of real-world clinical environments.

CERTIFICATIONS

- Introduction to Cloud Computing — Infosys (2025)
- Agile Scrum Master — Simplilearn (2025)