JANITH ATHTHANAYAKA

📍 Talpe, Galle, Sri Lanka — 📞 +94 718984922 — ✉ janithaththanayaka06@gmail.com

🌐 janithaththanayaka.com — 🔗 JanithSheshan — 💼 janith-aththanayaka

Professional Summary

Information & Communication Engineering graduate with expertise in IoT systems, AI/ML applications, and full-stack development. Experienced in embedded systems, EEG signal processing, and industrial IoT solutions. Strong research background with hands-on project implementation.

Professional Experience

Trainee Software/IoT Engineer – R&D

Sri Lanka Telecom - Digital Lab   *May–Nov 2025*

- Developed Industrial IoT solutions for SenseGrid project (sensegrid.sltdigitallab.lk) using ESP32 with Wi-Fi/4G connectivity
- Designed ThingsBoard dashboards with custom widgets for real-time machine health monitoring
- Built SenseGrid product website using React/JavaScript for enhanced data visualization
- Conducted on-site deployments at DSI factory production environments and diagnosed hardware issues
- Integrated current and infrared sensors for predictive maintenance capabilities

Education

BSc (Hons) in Engineering

Sri Lanka Technology Campus - SLTC

Information & Communication Engineering   *2021–2025*

Technical Skills

Programming Languages: Python, C/C++, JavaScript, PHP, Dart, SQL

Frameworks & Libraries: Flutter, TensorFlow, Flask, Bootstrap, React

IoT & Embedded Systems: ESP32, Arduino, MQTT, ThingsBoard, GSM/4G, PIC

AI/ML Specializations: EEG Signal Processing, RNN/LSTM/BiLSTM Networks

Web Development: HTML, CSS, JavaScript, PHP, MySQL, REST APIs

Tools & Platforms: Git, VS Code, Android Studio, PlatformIO, Figma, LaTeX

Freelance Websites

- **KML Group:** Corporate website for diversified business group - kmlgroupsl.com
- **Memorra Tours:** Travel & Tours website - memorratours.com
- **Sri Lanka Divers:** Dive service website with media gallery - srilankadivers.com
- **Sea Souls Diving:** SEO-optimized diving instructor site - seasoulsdiving.com
- **Thulawa Legal Res. Conf.:** Website for legal research conference organized by University of Colombo. - thulawa.org/rese-conf/index

Leadership & Achievements

- **Assistant Treasurer & IRP Coordinator**, IEEE Student Branch SLTC (2023/24)
- **Deputy Logistics Team Lead**, Codemania v3.0 Hackathon
- **4th Place Winner**, Codemania v4.0 Programming Competition
- **Finalist**, MoraXtreme 8.0 Competitive Programming

Research Interests

- Brain-Computer Interfaces & Neurotechnology
- Industrial IoT & Smart Manufacturing Systems
- Machine Learning for Biomedical Signal Processing
- Embedded Systems & Robotics Automation

Projects   (janithaththanayaka.com/projects)

AI-BCI for Robot Navigation   *2024-2025*

- Real-time BCI system using EEG signals for mobile robot navigation
- Implemented BiLSTM models achieving 94% accuracy in motor imagery classification
- Integrated ESP32 with MQTT communication for real-time control
- Deployed Flask web application for EEG signal processing and visualization

Custom POS System for Restaurant   *Nov 2025*

- Progressive Web App for restaurant chain with multi-platform support (Tab, PC, Laptop)
- Real-time order forwarding to Kitchen and Bar stations with live updates
- Comprehensive sales analytics dashboard for inventory and revenue tracking
- Reduced order processing time by 75% (from 8 to 2 minutes)
- Decreased order errors by 80% through automated validation

EntryEye - Door Monitoring System   *Jun 2025*

- ESP32-based system with Telegram notifications for shop visitor tracking
- Magnetic door sensor integration with 99.5% uptime reliability
- Real-time customer traffic pattern monitoring with instant alerts

Emergency Communication System   *2023*

- PIC microcontroller-based alert system with GSM communication
- Portable emergency device with 95% message delivery success rate

Currency Exchange Mobile App   *Dec 2024*

- Flutter Android app with real-time currency conversion and dynamic rates
- Reduced billing time from 5+ minutes to under 30 seconds
- Integrated cryptocurrency QR panel

Period Tracking Mobile App   *Jan 2025*

- Flutter app with calculation-based menstrual cycle predictions, and Privacy-focused design with local storage and calendar-based UI
- Clean, intuitive interface designed for user-friendly experience

EzText - Message Broadcasting   *Aug 2025*

- PHP/AJAX system for instant message broadcasting with maximum 3s latency
- Dual-interface PWA for owners and shop displays with real-time updates
- Reduced communication time by 90% compared to manual methods

References available upon request.