Graham Almeida

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PROFESSIONAL SUMMARY

Biomedical Engineering Technology graduate with hospital-based internship experience in maintaining, repairing, calibrating, and testing medical equipment including infusion pumps, Philips patient monitors, defibrillators, ECG machines, ultrasound systems, and incubators. Skilled in electrical safety testing, preventative maintenance, troubleshooting, and CMMS documentation. Proficient in networking, embedded systems, and programming with a strong foundation in healthcare technology standards. Dedicated to supporting clinical teams by ensuring safe, reliable, and compliant medical equipment.

Biomedical Engineering Technology - Equipment and Devices
St. Clair College, Windsor, ON
Graduated: April 2025
Relevant Coursework & Projects: Medical Device Servicing, Embedded Systems, Medical Imaging Technologies, Infusion Pump Project (IV Diaphragm Pump), Anxiety Detector Project
Diploma in Pharmacy
NMIMS University, Mumbai, Maharashtra
Graduated: January 2021

CERTIFICATIONS & TRAINING

- Electrical Safety Testing (ESA 609) Training
- First Aid, CPR , AED
- Introduction to Microcontrollers and Embedded Systems
- Worker Health and Safety Awareness
- COMPTIA network plus (Ongoing)

PROFESSIONAL EXPERIENCE

Biomedical Engineering Intern
Chatham-Kent Health Alliance, Chatham, ON
May 2024 – June 2024

- Performed preventative maintenance, repair, and troubleshooting on infusion and CADD pumps.
- Disassembled, reassembled, tested, and maintained **Philips and GE patient monitors** and Dräger devices.
- Conducted **electrical safety tests (ESA 609), SpO_2, and NIBP testing** across multiple medical devices.
- Used **Nuvolo CMMS** for documentation of work orders, compliance records, and maintenance logs.
- Collaborated with biomedical staff, ensuring adherence to healthcare standards and patient safety requirements.

Sous Chef (Leadership & Teamwork Role)

Spago's, Windsor, ON
April 2023 – Present

- Menu planning & execution
- Food safety & HACCP compliance
- Inventory management & cost control
- Knife skills & advanced plating techniques
- Team supervision & training
- Time management & high-pressure performance
- Effective communication & delegation
- Problem-solving & adaptability
- Developed strong teamwork, communication, and problem-solving skills transferable to technical healthcare settings

RELEVANT PROJECTS

Infusion IV Diaphragm Pump

- Developed a custom IV pump system using ESP32 with LVGL display
- Programmed flow rate (ML/hr) adjustments and volume tracking
- Integrated IR sensors for occlusion detection and real-time monitoring
- Implemented two-way communication between ESP32 boards for enhanced control
- Demonstrated biomedical device design, calibration, and safety integration

Anxiety Detector

- Led as the Secretary of the Project Group
- Programmed ESP32 using Micro Python
- Designed a system to detect anxiety attacks using breathing sensors and ECG monitoring
- Implemented an alert mechanism triggered by abnormal physiological changes
- Developed the device to be compact and user-friendly

TECHNICAL SKILLS

- **Biomedical Equipment:** Infusion pumps, CADD pumps, Philips patient monitors, defibrillators, ECG machines, ultrasound systems, incubators, electrocautery units, infant warmers.
- **Hardware & Tools:** Oscilloscopes, multimeters, soldering equipment, electrical safety analyzers.
- **Software & CMMS:** Nuvolo, Medimizer, TMS, AutoCAD.
- **Programming & Systems:** C, Micro Python, Arduino IDE, embedded systems, basic networking.
- **Healthcare Standards:** Preventive maintenance, calibration, troubleshooting, risk management.

ADDITIONAL INFORMATION

- Valid G-class driver's license with reliable vehicle.
- Physically able to lift up to 25 kg as required.
- Committed to advancing medical technology and supporting patient safety.