

Emmanuel J Millan

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PROFESSIONAL EXPERIENCE

Sigma Biomedical

Sunrise, FL

Biomedical Compliance Engineer

2022 - Present

- Conduct device instrumentation and data analysis using equipment such as oscilloscopes, doppler ultrasound systems, spectroradiometers, and electrical safety analyzers.
- Design and execute test protocols for acoustic, optical, and electrical safety testing for medical devices according to ISO and IEC standards such as IEC 60601-1, ISO 8600-1, IEC 60601-2-37, among others.
- Spearhead and coordinate testing for medical devices such as ultrasound catheters, endoscopes, and medical gels.
- Produce tissue-mimicking phantoms for ultrasound catheter testing.
- Participate in regulatory meetings and cooperate in drafting of 510(k)s for clients.

Terumo Aortic

Sunrise, FL

Research and Development Intern

June 2022 – Dec. 2022

- Evaluated stent-graft deployment forces on a team of engineers using aorta vasculature modeling.
- Interacted regularly with SAP and SmartSolve QMS systems, heading various changes-such as drawing revisions or document creation and revision- requiring interdepartmental cooperation and approval.
- Performed Lab Technician duties, conducting maintenance checks and ensuring equipment was calibrated.

EDUCATION

University of Miami

Coral Gables, FL

Master of Science in Neural Engineering

Expected 2025

University of Miami

Coral Gables, FL

Bachelor of Science

May 2022

Major in Biomedical Engineering, Premed Concentration

GPA 3.602

Major in Mathematics, Applied Analysis Concentration

COMMUNITY ENGAGEMENT

Joe DiMaggio Children's Hospital

Hollywood, FL

Volunteer with Child Life and Surgical Services

July 2024 - Present

- Assist patients by helping them move, eat, and perform other tasks.
- Look after, aid, and play with patients who need company.
- Aid Child Life Specialists with duties across the hospital, such as escorting and caretaking patients, and restocking toys.

University of Miami

Coral Gables, FL

Peer Tutor

Aug 2021 – Dec 2021

- Helped students in need of tutoring for math subjects up to Differential Equations and Linear Algebra.
- Tutored students in biomedical engineering subjects such as Transport Phenomena and Mathematical Analysis in BME.

SKILLS

Proficient Skills: MATLAB, QMS, LabVIEW, ISO Standards, Document Control, Microsoft Excel, Acoustic Testing, Spectrophotometry, Electrical Safety Testing, Sonography, Circuit Design.

Limited Experience: Arduino, C++, SolidWorks, R, Image Analysis.

Languages: English (native proficiency), Spanish (native proficiency).

Interests: CRISPR, Neuroengineering, Tissue Engineering, Cardiovascular Devices, Woodworking, Pickleball.

