CARLOS MATEO JURADO DÍAZ

Dedicated Bioengineer with a strong foundation in medical devices and neuromodulation, currently advancing my expertise through a Master's degree in Artificial Intelligence. With extensive experience at Medtronic, I've honed my skills in providing surgical support, programming neurostimulators, and ensuring patient safety in high-stakes environments. My background in medical devices, combined with a strong analytical mindset and problem-solving abilities, equips me to contribute effectively to quality and compliance initiatives. I am committed to leveraging my technical skills and experience to drive innovation and support continuous improvement in the healthcare industry.

SKILLS

- Neuromodulation Expertise: Deep Brain Stimulation (DBS), Spinal Cord Stimulation (SCS), Targeted Drug Delivery (TDD), Peripheral Nerve Stimulation (PH)
- Surgical Support: Assisted in DBS and PH surgeries
- Neurostimulator Programming: Skilled in programming neurostimulators
- Patient Care & Education: Educated patients on neuromodulation therapies
- Medical Device Management: Managed Stealth Planning Station, The Guideline 5, and neuromodulation implants
- Technical Proficiency: MS Office, R, Python, Azure, Flask, Bootstrap
- Communication & Collaboration: Effective in high-pressure environments

EXPERIENCE

Medtronic, Bucaramanga, Colombia — External Support

FEBRUARY 2023 - PRESENT

- Provided surgical support in neuromodulation procedures, including DBS,
 SCS, TDD, and PH, ensuring successful patient outcomes.
- Programmed neurostimulators (DBS, SCS, PH) to optimize therapeutic outcomes for patients.
- Conducted TDD pump refills, ensuring accuracy and patient safety.
- Provided MRI support, ensuring high-quality imaging and patient comfort.
- Educated patients on neuromodulation therapies, enhancing their understanding and adherence to treatment.

University of Antioquia, Medellín, Colombia — Research Student

SEPTEMBER 2021 - APRIL 2022

- Designed and tested analog filters to enhance signal quality in an embedded sEMG signal acquisition system, significantly improving the clarity and usability of acquired signals.
- Integrated analog filters with an ADC and I2C interface to facilitate seamless digitization and signal processing, enhancing overall system efficiency and performance.
- Designed the PCB ensuring optimal layout for signal integrity and system performance, reducing noise and ensuring reliable data acquisition.

University of Antioquia, Medellín, Colombia - Laboratory Monitor

NOVEMBER 2021 - APRIL 2022

- Tutor students in laboratory procedures and concepts.
- Review and manage laboratory inventory.
- Assist teachers in laboratory preparation and demonstrations.
- Review and comment on student lab reports.

EDUCATION

International University of La Rioja, Spain — Master of Science (MS) in Artificial Intelligence

MARCH 2024 - PRESENT, DISTANCE EDUCATION

International University of La Rioja, Spain — Graduate Certificate (GCert) in Data Analyst for Artificial Intelligence MARCH 2024 - PRESENT, DISTANCE EDUCATION

University of Antioquia, Colombia — Bachelor of Engineering (BE) in Bioengineering

FEBRUARY 2015 - JUNE 2022, MEDELLÍN, COLOMBIA

AWARDS

Achieved honors in the 2019-2 semester at the University of Antioquia.

Participated in an academic exchange in 2019 at the University of Veracruz in Mexico.

LANGUAGES

Spanish (Native) English (B2)

CERTIFICATIONS

Continuing Education Certificate in Leadership, MIU City University Miami —
April 2024

Azure Fundamentals, Microsoft - March 2024

GitHub Fundamentals, Microsoft - March 2024