

LUIZ GUILHERME DE CASTRO SANTOS

Valencia, Spain | luizg_castro@live.com | [LinkedIn](#) | [Lattes](#) | [ORCID](#)

Professional Experience

i3M – Instituto de Instrumentación para Imagen Molecular | CSIC | Valencia, Spain

R&D Engineer

Jul 2024 – Present

- Development and optimization of RF coils for specific applications, ensuring high-resolution imaging and patient safety.
- Design, testing, and integration of RF, DC, and AC circuits in complex MRI systems, including PCB design.
- Use of electromagnetic simulation tools to predict and enhance the performance of coils and circuits.
- Collaboration with engineering, physics, and software teams to develop innovative and integrated solutions.

Grupo Suprimed (Abbott EP Division) | São Paulo, Brazil

Technical Consultant – Electrophysiology Systems

Apr 2022 – Jul 2024

- In-theater support for RF ablation procedures using Ensite Precision 3D mapping.
- Operation of electrophysiological monitoring systems (polygraphy).
- Management of surgical materials and sterile logistics in cardiology units.

Hexamedical | São Paulo, Brazil

Technical Laboratory Analyst – MRI Hardware

Jul 2019 – Apr 2021

- Bench repairs of RF generators, amplifiers, power supplies, and MRI coils.
- Inventory control, KPI generation, remote technical support, and client service.
- Field experience with RF transducer diagnostics and component-level troubleshooting.

Education

PhD in technologies for health and well-being, Low-field dental magnetic resonance imaging

Universitat Politècnica de València (UPV), Spain

Dec 2023 – Jun 2027 (expected)

MSc in Biomedical Engineering – Medical Devices

Federal University of ABC (UFABC), Brazil

Sep 2020 – Nov 2023

BSc in Biomedical Engineering – Instrumentation Focus

Federal University of ABC (UFABC), Brazil

2018 – 2021

BSc in Science and Technology

Federal University of ABC (UFABC), Brazil

2013 – 2018

Languages

- **Portuguese:** Native
- **Spanish:** Fluent
- **English:** Fluent