

May 11, 2025

Dear Selection Committee,

I am writing to express my interest in the Joint Master's program "Managing the Digital Transformation in the Health Sector".

I am currently in the final year of my master's degree in Biomedical Engineering and Biophysics at the Faculty of Sciences of the University of Lisbon (FCUL, [www.ciencias.ulisboa.pt](http://www.ciencias.ulisboa.pt)), awaiting the defense of my dissertation. My academic training comprises basic engineering courses such as Mathematics, Statistics, Programming, Mechanics, Instrumentation, and Radiation Physics, as well as Anatomy, Physiology, and Cell Biology, as detailed in the attached documents. Ever since I began my studies, I have always been curious and fascinated by how biomedical engineering can be applied to the healthcare sector, particularly in the context of its ongoing digital transformation.

As part of my master's degree, I did my master's dissertation at "MEDES – Institute for Space Medicine and Physiology" in Toulouse. The objective of this research project was to automatize and standardize the detection of pre-syncope states during tests assessing orthostatic intolerance, which were conducted both before and after exposure to simulated space environments. This research project required a combination of programming skills, data analysis techniques, and clinical insight. Additionally, I had the opportunity to participate in the "LBNP validation campaign", where I was responsible for data acquisition using the Cheetah Starling SV system. This whole experience not only strengthened my interest in health innovation but also demonstrated the value of digital processes in space medicine.

Furthermore, other experiences listed in my attached CV have enabled me to acquire additional skills. For instance, completing an internship outside of Portugal in 2022 (in Leuven, Belgium) made me a more versatile individual with a greater ability to adapt to different situations. It also allowed me to learn good laboratory research practices and sparked a stronger interest in exploring healthcare practices across different countries and cultures. Besides this, being elected representative of my class for the five years of my studies provided me with the opportunity to act as an effective intermediary between the needs of my colleagues and the priorities of the professors at my university.

In parallel with my studies, I have started working as a Business Analyst trainee at Capgemini Portugal, where I am being trained in industry-standard tools, methodologies, and best practices. Over the next five months of my internship, I will gain practical experience in stakeholder collaboration, process analysis, requirements gathering, solution design, testing support, documentation, and project management through Agile team participation and project support. I plan to apply these management skills directly within the healthcare sector.

To sum up, I am confident that my biomedical engineering background, skills, experience, fluency in English, and strong motivation are well aligned with the entry requirements of this master's degree and therefore make me a suitable candidate. I am particularly drawn to this program for its interdisciplinary approach, international scope, and its focus on equipping professionals to lead digital transformation in healthcare systems. I look forward to deepening my expertise in a field I am passionate about and building a career at the intersection of technology and patient care.

Thank you for your consideration.

Sincerely,

Alexandre Pinto