

## Lucas José Velôso de Souza

## DEAR MENTORS OF ML4SCI,

My name is Lucas José Velôso de Souza, brazilian born in the city of Brasília, and I am an undergraduate student in Computer Engineering at the Instituto Tecnológico de Aeronáutica (ITA; English: Aeronautics Institute of Technology), in Brazil, and currently in double degree at CentraleSupélec. Throughout my life, curiosity and a passion for discovery have been my greatest guides. Since high school, I have always been passionate about chemistry and physics. And it was this passion that led me to dedicate myself to the study of both of them in a serious way and, as a result, I was awarded a silver medal at the Brazilian Chemistry Olympiad and a golden medal in Brazilian Physics Olympiad, both at the National level. With this, I discovered that my true vocation was to apply science to solve real problems.

After that, during my degree in Computer Engineering, I was introduced to the world of Artificial Intelligence and Machine Learning, and I was immediately enthralled by the ability to efficiently solve complex problems. With this perspective, I understood that data science is a powerful tool to understand the world and turn ideas into reality. In this sense, I deepened my knowledge on these topics, which allowed me to participate in robotics and data science competitions in Brazil and France, having obtained excellent results in several of them, such as, for example, the Latin American Robotics Competition (LARC), where I had the opportunity, with some colleagues, to represent my institution and we won a silver medal, and recently, in France, the national competition of the ANFR (National Frequency Agency of France), where we obtained the first place given by the technical jury.

Through these competitions, as well as my commitment to deliver the best possible solutions to the problems I faced, over time, I developed advanced skills in data analysis and visualization. Thus, my previous experience as a data scientist allowed me to work with some of the largest companies in Latin America, including ITAÚ, the largest bank in the region, where I was able to apply my skills in artificial intelligence and machine learning to solve real-world problems. This experience further solidified my passion for data science and my commitment to finding innovative solutions to complex problems.

Therefore, with this passion and experience in data science, and with the mentioned background in physics and chemistry, I would like to apply not only for Google GoC, but mainly to ML4SCI's project, which is science-oriented. As mentioned, I have a keen interest in science and I am also excited to contribute to research in deep learning, an area that today significantly impacts people's lives and also offers fascinating opportunities to apply, in our case, physics through data modeling. In addition, I also look forward to being part of the Open Source Science Community and learning from the best in the field, which motivates me, even more, to apply for the position. I am confident that my skills in data analysis, problem-solving and creative approaches will be useful for the ML4SCI's team and will contribute to the success of the project.

Thank you for your attention and I hope to be able to contribute to the success of the proposed program.

Yours sincerely,

Lucas José