

**Professional Project Letter**

Thursday 20<sup>th</sup> September, 2018

Dear selection comitee,

My name is João Gabriel, I'm a student of Computer and Information Engineering, currently in the sixth semester of graduation. I write to express my interest in studying in the ParisTech schools and taking part in your exchange, and in special your Double Degree, program.

During my time in UFRJ, I joined two laboratories which helped shape my views on engineering and what I want to achieve for my future, first joining the Laboratory of Machine Intelligence and Models of Knowledge (IM2C) and, later, the Laboratory of Informatics and Society (LabIS).

An interest in researching topics related to machine learning and artificial intelligence motivated my decision to join IM2C. There, I joined a research project in knowledge representation, helping to set up the mathematical foundation for a model based on geometry and also interpreting its results. The project served as a great introduction to more abstract concepts of the area giving me a stronger theoretical basis. Likewise, it worked as a confirmation that the world of AI is even more fascinating than I thought before, and that it is a direction I want to pursue.

However, I had only a single dissatisfaction with the research at IM2C. It was doing this more theoretical work I realized how essential to my personal fulfillment was working on a project with a focus on the application.

In order to fill that void, I joined LabIS, a Laboratory focused in creating software with a social outlook. Most of the projects deal with groups who otherwise would have difficulty getting support in form of software, such as poor communities and disabled people. My time in LabIS served as confirmation of how significant to me is seeing projects I worked into have a visible impact on people's lives.

These experiences helped me shape my goal for the future. I wish to unite both worlds and to work on projects which are both related to the general area of AI and also capable of having a significant social impact.

This programme fits in with my vision by being able to help with both points. France is emerging as one of the leading countries in AI research and development, having both governmental support and having several promising start-ups and established research centers. ParisTech focus on integration with the private sector only improves this point, in which knowledge and techniques from this vibrant world of French AI research become even more accessible. Not only that, ParisTech has schools such as Télécom ParisTech which excel in computer science and AI. This provides an excellent technical basis needed to compete on what already is a very competitive job market.

At the same time, achieving the sensibilities and empathy required to work on a project with a social focus is not an easy task. Both cannot be taught in a classroom and result from having a multitude of life experiences that expose you to different realities. One way to get those experiences is through an exchange programme, such as this one. ParisTech is special due to its large amount of international students, whose unique realities can help one become more familiar with worldviews and issues that wouldn't be available otherwise.

After the conclusion of the programme, I would like to take part in a company that would be supportive of my goals and would assist my improvement as a professional. As discussed before, France's booming AI market is a huge attraction on this point. There's also the possibility of entrepreneurship, in which both French government's policies that concentrate on AI and ParisTech's focus on innovation and entrepreneurship itself can serve as a great help in providing the support and knowledge necessary to achieve success.

I hope I've been able to share some of my world views and aspirations for the future. I believe the opportunities and requirements of the programme fit with both my plans and desires as both as a student and a person. It would be an incredible opportunity to take part in your elite institutions and to contribute as much as I can with my work.

Thank you for your time and consideration,

**João Gabriel Lopes de Oliveira**