JEREMIE NLANDU MABIALA

African Institute for Mathematical Sciences (AIMS)

African Master In Machine Intelligence (AMMI)

📍 1418 Km2 Route Joal, Mbur, Senegal

jeremie@aims.ac.za   jeremy@aimsammi.org   https://jnlandu.github.io/

November 1, 2024

The Admission Committee
Paul Painlevé Laboratory
University of Lille
Villeneuve-d'Ascq, France

Dear Members of the Admission Committee,

I am writing to apply for the doctoral position in Mathematical Modelling of the Effect of Senescence in Cancer Progression at the Paul Painlevé Laboratory of the University of Lille. I was pleased to learn about this offer through Professor Sophie Dabo, who recommended me to apply and has mentored me during my Master's program at AIMS South Africa on Functional Data Analysis. I will be excited to contribute to your esteemed lab and pursue my academic and research aspirations in the field of Mathematics, in particular Mathematical Modeling. I am confident that my academic background, research interests, and skills make me an ideal candidate for this position.

I am currently pursuing a Master's in Machine Learning at the African Masters in Machine Intelligence (AMMI), the Africa's forefront Machine Learning program, at AIMS Senegal. Previously, I obtained a Master and Bachelor's degree in Mathematics.

In my Master's thesis in Mathematics, we investigated the possibility of developing a statistical model that uses Gaussian processes for multivariate functional Data. This model has potential implications for cancer modeling and various real-world problems that depend on a continuum, such as time or space. This experience provided me with a solid foundation in applied mathematical research and has helped me gain insights into Functional Data Analysis, Statistical Modeling, and Programming with R.

My current program in Machine Learning has equipped me with a good understanding of machine learning techniques, both the theoretical and practical aspects. I believe this expertise will be important for this project. I am particularly excited to join the Paul Painlevé Lab. The topic has exceptional appeal for me, not only because of its interdisciplinary aspects and it lays on the domain of my interests but it seeks to address one of the critical global challenges.

I am enthusiastic about the possibility of contributing to your team and to pursue my academic aspiration. I do believe that my dedication to research will allow me to contribute positively to the project.

Thank you for considering my application. I am looking forward to the opportunity to discuss my application in further detail.

Sincerely,
Jeremie Nlandu Mabiala