VIN Charles
Master's final year internship
Biodiversification inference with graph neural networks

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Laurent Jacob & Hélène Morlon
LCQB & IBENS
Sorbonne University & ENS Ulm

Dear Laurent Jacob, dear Hélène Morlon,

I hope this letter finds you well. I am writing to express my strong interest in the internship opportunity entitled "Biodiversification Inference with Graph Neural Networks" within the Laboratory of Computational and Quantitative Biology at Sorbonne Université, under your esteemed guidance. As a graduate student about to complete my data science master's degree, I am excited about the prospect of contributing to a project that lies at the intersection of machine learning, ecology, and evolutionary biology.

Your project, which focuses on developing a graph neural network to estimate diversification parameters using phylogenetic trees, aligns perfectly with my passion for biodiversity and my academic background in data science and machine learning. While my prior experience primarily revolves around image classification and neural network development, I am keen to diversify my skill set by diving into the world of graph neural networks.

Graph neural networks have shown potential in various fields, and I recognize their significance in understanding complex interdependencies and relationships within biological data. In the context of your project, graph neural networks can be instrumental in deciphering the intricate web of relationships among species in phylogenetic trees, allowing for more accurate estimations of diversification parameters. Such advancements can help us gain deeper insights into how various factors have shaped the evolution of biodiversity, which is a topic that resonates with my ecological values.

I believe my background in machine learning, neural network development, and data science, combined with my enthusiasm for ecological research, makes me a suitable candidate for this internship. I am confident that this experience will not only be a tremendous learning opportunity for me but will also allow me to make a meaningful contribution to your project.

Thank you for considering my application. I look forward to the possibility of discussing how I can contribute to your research in more detail during an interview. Please find my CV attached for your reference.

Yours sincerely,

Charles Vin