Mohaddeseh Mozaffari

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Department of Computer Engineering and Software Engineering
Polytechnique Montreal
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Dear professor Lombaert,

I am interested in applying "PhD Position in Medical Image Analysis for Knee Surgery" at Polytechnique Montreal. I have a strong background in statistical physics and complex systems. This, combined with my passion for medical imaging and machine learning, has led me to pursue research that may be useful in these areas. I believe that being on your multidisciplinary team is the perfect environment to work with experts from diverse fields, especially computer vision and medicine.

I am currently completing my master's degree at Shahid Beheshti University, where I am analyzing fMRI data using Topological Data Analysis (TDA). Additionally, I am collaborating on a project focused on segmentation of coronary artery vessels using X-ray angiography image analysis. These experiences helped me apply machine learning and AI techniques to real-world data with great insights. I also have a strong programming background in Python, C++, and Git, and I love sharing my code on GitHub to teach others and help others benefit from my work. To share more knowledge I also teach Python programming, which has helped me improve my ability to explain difficult concepts in a simple way to people with different backgrounds and learning styles.

I am particularly excited about the career opportunities that integrate machine learning, computer vision and health care. Because it is consistent with my previous experience. Recently, I found out that I have ADHD, and it made me realize how much medical research can improve lives. This personal experience has increased my motivation for medical research, and I hope to use my skills to make a meaningful impact in these areas.

I have heard that Montreal has a high safety index for walking alone during night, and it is a good opportunity for me because in my city, I can't do that and really want to know what it feels like. Also, Montreal gives me an excellent chance to improve my French language skills and communicate with people from various cultures.

Thank you for considering my application. I am excited to bring my skills and knowledge to your PhD project. And I look forward to the opportunity to join your team in shaping the future of medical image analysis.

Sincerely,
Mohaddeseh Mozaffari