## Mohaddeseh Mozaffari

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The Hôtel-Dieu of Quebec 6 rue McMahon 4672 Quebec, QC Canada G1R 3S3 Venkata.manem@crchudequebec.ulaval.ca December 12, 2024

Dear professor Manem,

I am interested in applying "PhD Position in Machine Learning applied to Medical Imaging and OMICS in Breast Cancer" at the CHU de Québec-Université Laval Research Center. 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 this position would be the perfect environment for me to continue my research in medical imaging and data science, areas that I am deeply passionate about.

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 deeply interested in the medical field when COVID-19 started. I saw how scientists and researchers worked hard to find a cure during the quarantine. This experience inspired me because it showed me how important the medical field is and how it can impact every person's life. Additionally, I was recently diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), and after starting treatment, my life improved significantly. Now my quality of life is much better, and this has motivated me even more to pursue medical research. I want to use the skills I've gained so far to help others.

Furthermore, I am interested in moving to Quebec City, as it is known for being a very safe place for single women. Women can walk alone at night without fear, which is very different from where I currently live, where it is quite dangerous. Quebec City also offers the opportunity to interact with people from different cultures, which excites me. Additionally, I found out that the Government of Québec offers free French language classes, which will help me improve my French. Unfortunately, I cannot afford French courses due to their high cost where I am now, so this is another reason I am attracted to this city.

Thank you for considering my application. I am excited to bring my skills and knowledge to your PhD project. I look forward to the opportunity to discuss how my skills and experiences can contribute to the exciting projects at CHU de Québec-Université Laval.

Sincerely,

Mohaddeseh Mozaffari