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Ivar Cashin Eriksson

Hello Bulat Ibragimov, I am writing to apply for the PhD position in AI in Medicine. With a Master's degree in data science and applied mathematics, and 6 years of professional hands-on experience working with machine learning, I am excited to return to academia and to contribute to advancing AI-driven cancer treatment. I wish to pursue deep, curiosity-driven research to further my learning and your project research topic sounds like an extremely good fit for me.

Directly after my studies I continued work at RaySearch Laboratories in Stockholm where I had written my Master's thesis previously. My experience at RaySearch as a Data Science Researcher left a strong, long-lasting impression. I developed probabilistic and computer vision-based ML methods for radiotherapy planning of cancer treatment. This included development of deep autoencoders for feature extraction and distance learning. In addition, I developed lexicographic optimisation algorithms for palliative care. To ensure clinical relevance, I worked closely with oncologists who would be the end-users of the tools I was developing. The work was challenging and rewarding. Though I had to leave Stockholm in 2021 to move to Copenhagen, my motivation to return to more research-intensive work has only grown stronger since.

Since moving to Denmark, I worked as a Data Scientist in a consulting capacity where I have been able to apply my skills in a variety of industries. I have worked with a wide range of data types, such as time series and natural language. I have also developed a strong understanding of the entire machine learning pipeline, from data collection and preprocessing to model deployment and monitoring. This experience has equipped me with the practical perspective and engineering rigor needed to address complex real-world challenges in radiotherapy planning.

Outside of work, I fill my free time with designing furniture, woodworking, coding, 3D-printing, climbing, road biking, ultimate frisbee, and board games, activities that keep my hands and mind sharp. I thoroughly enjoy picking up new skills and am self taught in all my hobbies. In my professional life, I now want to return to a research environment where I can follow ideas from early exploration to experimentation, refinement, and ultimately publication. I find long-term, curiosity-driven projects deeply motivating, especially when they combine theory, technical implementation, and collaboration across disciplines. I am particularly drawn to your group's integration of medical image analysis and machine learning with clinical practice.

I hope to hear back from you soon. Regards,

Ivar Cashin Eriksson.