November 10, 2023

Dear Hiring Manager,

I am writing to express my strong interest in the position for **Machine Learning Engineer - Sports Technology**. The skills that make me a strong candidate are developed over 10+ years of professional software development experience and a Ph.D. in Computational Sciences focusing on applied machine learning. I have a background in using machine learning tools to identify online students' behaviours and suggest interventions to improve learning outcomes. I am confident these abilities can contribute to my success in this position at EA Sports.

During my career, I have worked in large software development and with multidisciplinary teams. I have had the opportunity to lead small software teams, liaise with multiple project stakeholders, and design full software systems.

Key Highlights:

- Published commercial video games for **Nintendo and Apple**.
- Developed a cutting-edge **computer vision** projection-mapping prototype, which was demoed at SIGGRAPH and was developed into a leading product.
- Developed physiotherapy applications using **machine learning** pre-trained models to provide cost-effective solutions.
- Developed an educational platform, used in university courses, that used **machine learning** to analyze student study patterns and develop long-term behavioural profiles.

I completed my Ph.D. in Computational Science at the University of Guelph. My research applied machine learning algorithms to evaluate students' online behaviour to differentiate key learning patterns toward classroom success. During this time, I worked as a sessional instructor at the university, teaching introductory mathematics and computer science courses to upwards of 300 students per class.

During my time at **Western University**, I gained valuable experience in working with multidisciplinary healthcare workers and researchers, developing applications from stakeholder requirements to finished applications or websites. This work focused primarily used the following languages: **NodeJs, Streamlight, JavaScript, and Python**. Combined with my PhD experience, I have honed my development skills and knowledge in deploying machine learning skills using tools like **Pandas, Numpy, Scipy, Scikit-learn, Ploty, and Seaborn**.

Thank you for considering my application. I am excited to discuss how my skills and experiences align with the needs of this team and the opportunity to contribute to the center's continued leadership and success.

Sincerely,
James Fraser