

Zejia Cai

Junior Application Developer

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TO

ABMI Hiring Manager

Alberta Biodiversity Monitoring Institute

116 St & 85 Ave

Edmonton, AB T6G2R3

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Dear Hiring Manager,

My name is Zejia Cai (James) and I would like to express my enthusiasm for the Application Developer position within ABIM at University of Alberta that's posted on LinkedIn. I have been learning about AIBM & UoA and I am impressed by the university culture and commitments that AIBM & UoA has made to diversity, equity, and the environment. My passion for these principles aligns perfectly with AIBM & UoA's vision. Therefore I sincerely feel grateful to have this opportunity to apply to this job. I have proven my ability to accomplish hands-on tasks and solve unfamiliar problems, and I would be thrilled to use these skills to help the company to make positive change to the world.

During my research project at SFU, I designed and implemented a software tool for enhancing 3D models with human-interactive components, which honed my problem-solving and time management abilities, and allowed me to adapt rapidly to new technologies. This research project comprises engineering concepts, 3D models, C#, and RhinoCeros, which I had never learnt in my courses. However, I managed to learn all the unfamiliar concepts and finished the project in just 6 months while I was taking another four courses. Since the software tool is open sourced, therefore, I have ensured it is clean and maintainable, with comprehensive software documentation, as I typically do. During the project, my role required significant collaboration with a multidisciplinary team that defined requirements, design solutions and test functionality throughout the whole project, which prepared me to work effectively in your team's collaborative environment. This paper will be published in October.

In addition to my research project experience, I have experience working with implementing software applications using C/C++, Python, Java and Kotlin. For example, I have learnt data structure in C++ and implemented a path finding software tool as the final course project. This software comprised three pathfinding methods leveraging multiple self-implemented data structure classes in C++. I also have a strong knowledge of database administration, database installation and security. For example, recently I have implemented the backend of a website as my final project on my Distributed System course. The backend services are designed to manage data in their databases and perform tasks. Moreover, I also deployed these databases on the cloud.

Additionally, my experience with version control systems like Git, along with my strong communication and problem solving skills will allow me to make significant contributions to your team. As a person who experiences many different cultures, I hope my experience can help ABMI to make more positive changes to Alberta. I would enjoy discussing with you more about my qualifications for this position. Thank you for your consideration and I am looking forward to hearing from you soon.

Sincerely,

Zejia Cai