Kamila **Bekshentayeva**

OPEN FOR DESIGN TECHNOLOGY/ICT TEACHING POSITION;
FORMER: SENIOR LECTURER, RESEARCH AND TEACHING ASSISTANT, DATA SCIENTIST, AI MENTOR

Beijing, China

☐ (+86) 13911520830 | ✉ 1002kbd@gmail.com | 🏠 www.bkamila.com | in www.linkedin.com/in/kdagilova

"Be the change that you want to see in the world."

With the advancements of emerging and prospering fields like machine learning, information science and security, data science and data analytics - I believe making relevant courses and seminars easily accessible to secondary school students has multiple benefits including wider range of options when it comes to choosing their career paths. Personally, I feel deeply fulfilled by the opportunity to support secondary students in their educational journey by imparting the foundational principles of STEM courses.

I have always been fascinated by science, math, and technology and by what they can attain when effectively applied together with human intelligence, passion, and ethics. Despite recently receiving my **Master of Applied Science degree** in Engineering, I have realized that my true passion lies in working within educational environments and making a positive impact on younger generations. My enthusiasm stems from the desire to share the technical knowledge I have acquired and immerse students in the world of science and technology. By providing hands-on experiences, conducting engaging experiments, and showcasing the practical applications of STEM subjects, I aim to foster a love for learning and empower students to explore the endless possibilities within these fields. Therefore, **I'm highly motivated to apply for a STEM (Design Technology, ICT) school teaching position.**

I have applied to the **PGCE at Moreland University** that helped me learn "how" to teach and become proficient at this by providing a unique opportunity to not only participate in the course delivered by the world-leading educators, but also by letting me **assist as well as be guided by the teaching team at a placement school** in delivering lectures, designing curriculum and workshops, communicating with students. Engaging in this opportunity not only helped me enhance my expertise in the subject but also provided me with invaluable knowledge of managing learning environment, culture of schooling, learning in a digital age, etc. This **comprehensive approach** significantly contributed to my goal of becoming a qualified secondary school teacher.

My past academic, research, and work experiences, besides preparing me to become an engineer, developed in me the valuable skills required to become a competent instructor. These skills are **interpersonal and intercultural communication, teamwork and team organization, problem-solving and flexibility, confidence, critical thinking, behavior and time management.** Throughout my pursuit of a Master's degree, in addition to being a research assistant, I had a privilege to **work as a Teaching Assistant** (TA). A particularly notable experience was my role as a TA in the **Data Communications and Networking** (CMPT 371) course, led by Professor Ouldooz Baghban Karimi (PhD, PMP, President of Academic Women at SFU). Within this course, I had the opportunity to engage with a vibrant cohort of 118 undergraduate students, imparting essential knowledge and skills related to data communication fundamentals. I assisted the course by facilitating the laboratory components, holding office hours and helping the students with the homework and course material, grading their exams, homework and lab assignments. Building positive relationships with the students was of utmost importance to me. I made a concerted effort to be approachable and attentive to their needs. By holding regular office hours and providing timely feedback on their assignments, I established an environment where students felt comfortable seeking assistance and guidance. This not only fostered a sense of trust but also strengthened our connection as a learning community.

The Engineering Technology and Society (ENSC 100) and Process, Form, and Convention in Professional Genres (ENSC105W) courses taught by late Professor Steven Whitmore and by lecturers Michael Hegedus and Michael Sjoerdsma were additional examples of truly rewarding, enjoyable, and meaningful TA work. The first course covered the history of engineering and its effects upon society including the concepts in **artificial intelligence (AI) and information theory**. The second course was a co-requisite of the first, shared the same instructors, and taught the **fundamentals of informative and persuasive communication for engineers and computer scientists**. In my role as a TA, I had an opportunity to effectively communicate with and engage students in the course material during recitation classes. This not only fostered a deeper understanding of the subject matter, but also allowed me to build positive and meaningful relationships with each student. With a class size of 100 students, divided into 25 per recitation class, I took on the responsibility of not just teaching, but also **leading them through their design projects** - from the initial idea to the creation of a fully functional prototype. By fostering open discussions and encouraging questions, I facilitated a dynamic and interactive classroom experience. It was a professionally enriching experience that honed my teaching and leadership skills, ensuring that each student received the guidance and support they needed to succeed.

Upon completing my Master's program, I found great joy in the opportunity of **designing and teaching Information Security courses as a senior lecturer** at Astana IT University with more than 200 undergraduate students each semester. With the recent pandemic years, I have discovered the flexibility of online and hybrid formats lecturing where I was able to create a supportive and inclusive learning environment by actively encouraging student participation in any lecture format. The recitation classes (each class under 30 students) were taught offline. There, by relating complex concepts of computer networks and security to practical scenarios, I helped students grasp the relevance and applicability of information security. I was guiding the students to further deepen their knowledge with the help of laboratory component where they learned how to use tools for analysing the Internet performance and apply their programming skills. The experience was not only personally fulfilling but also affirmed my passion for teaching and mentoring.

Another example of a fulfilling activity that provided chances for learning and aiding others to succeed was my role as a mentor in "AI4All: Invent the future" - Canada's first and only summer enrichment program focused on bringing AI expertise to 9-12 grade female students. In a role of a **program mentor** I was responsible for facilitating **Python workshops**. These workshops aimed to provide students with exposure to various aspects of AI, such as robotics, computer vision, natural language processing, and computational biology. During code-along sessions and group projects, I assisted students in troubleshooting their code and led team-building activities. It was a privilege to be a part of their educational journey and contribute to the students' growth and success.

I also had the opportunity to participate as a mentor in the "Technovation Girls" program, which encouraged **girls to address community issues using technology**. The team I mentored worked on creating a mobile application with the goal of reducing the suicide rate among teenagers in Kazakhstan. To engage the students, I utilized various teaching techniques such as incorporating real-world examples and case studies. Collaboratively, we explored possible existing problems, delved into AI and technology solutions, researched various app-building platforms, developed mission, vision, and values statements, calculated operational costs, planned the project, wrote code to build a minimum viable product, prepared a prototype, and crafted a compelling pitch video. My group's impressive work allowed them to become finalists in the national competition. One of the most rewarding aspects of being a mentor was witnessing the remarkable growth and progress of the students throughout the program.

Teaching offers an ongoing learning experience, as it involves examining concepts from various perspectives and exploring diverse approaches to communicate information based on the age, abilities, and specific objectives of the audience. Besides teaching regular classes, it would bring me great joy to teach **after school activities** that not only involve technology: technical writing, cybersecurity, but other activities that I'm interested and have sufficient practice in: fluid art, Chinese tea ceremony, yoga and fitness. Such versatile and dynamic process of teaching would encourage continuous growth and improvement for educators and students, ultimately contributing to the success of both.

Overall, holding a **role of a STEM instructor**, allows to engage with students coming from diverse cultural and educational backgrounds. This motivates me to stay abreast of the latest advancements in science and technology. It's truly captivating to witness the unique perspectives and ideas that each student shares, fostering a dynamic learning environment that enriches both their educational journey and my own professional growth.