Dear Asako Kanezaki-sensei,

I hope this message finds you well. My name is Krish Bakshi, and I am writing to express my keen interest in contributing to the groundbreaking research conducted at the Automation & Knowledge Laboratory and applying for the master’s program at the Tokyo Institute of Technology for the Fall/September 2025 intake. Your pioneering work in computer vision, robotics, machine learning, and 3D data recognition, particularly your publications such as "A Framework for Training Larger Networks for Deep Reinforcement Learning" and "Multi-Agent Visual Coordination using Optical Wireless Communication," resonates deeply with my academic pursuits and career aspirations.

I am currently pursuing a Bachelor’s degree in Computer Engineering at Savitribai Phule Pune University, where I have developed a strong foundation in machine learning, computer vision, and optimization techniques and have maintained a strong academic record of 8.5 CGPA. My coursework in Probability and Statistics and Machine Learning has enhanced my understanding of data-driven decision-making and computational modeling.

During my Data Science Internship at Profcess, I designed an automated image preprocessing pipeline for OCR, achieving 87% accuracy through advanced preprocessing techniques. Additionally, I contributed to time series forecasting projects using tools like Azure Databricks and PySpark, and worked on computer vision applications, such as a CNN-based Potato Disease Classification model, which utilized CUDA acceleration for efficient plant disease detection. My technical expertise in Python, TensorFlow, PyTorch, and computer vision frameworks aligns with the skillset required to contribute meaningfully to your research.

One of my most exciting projects, ImaginAIry, involved developing a text-to-image generation app using Stable Diffusion XL, showcasing my ability to integrate generative AI models with creative applications. These experiences have honed my problem-solving skills and deepened my interest in leveraging AI for advancements in robotics and 3D data analysis.

In addition, my Practical AI with Python certification reflects my ongoing commitment to developing expertise in AI and machine learning. Furthermore, my Japanese proficiency (JLPT N3) qualifies me as an ideal candidate to integrate seamlessly into your research environment and collaborate effectively in a Japanese academic setting.

I am particularly drawn to your lab’s focus on multi-modal interaction sensing and its applications in robotics and visual coordination, as I am eager to explore how these technologies can redefine human-computer and robot-environment interactions. Under your guidance, I hope to contribute to the development of innovative solutions that merge machine learning with real-world challenges in computer vision and robotics.

I would be honored to discuss how my skills and interests align with your lab’s objectives. I look forward to the possibility of collaborating and learning under your esteemed mentorship.

**Best Regards,**

Krish Bakshi