Dear Isao Ono-sensei,

I hope this email finds you well. My name is Krish Bakshi, and I am writing to express my keen interest in contributing to your research in evolutionary computation, optimization, and artificial intelligence, and applying for the master’s program at the Tokyo Institute of Technology for the Fall/September 2025 intake. Your impactful research, particularly on evolutionary algorithms, optimization problems, and derivative-free optimization, deeply resonates with my academic pursuits and aligns closely with my career aspirations.

I am currently pursuing a Bachelor’s degree in Computer Engineering at Savitribai Phule Pune University, where I have cultivated a solid foundation in artificial intelligence, machine learning, and optimization techniques, aside from maintaining a strong academic record of 8.5 CGPA. My coursework in Probability and Statistics and Machine Learning has equipped me with the skills to approach complex optimization challenges.

During my Data Science Internship at Profcess, I contributed to developing scalable data pipelines for time series forecasting, leveraging tools such as Azure Databricks. I implemented advanced predictive models, including XGBoost and SARIMA, to enhance forecasting accuracy. My project portfolio also includes PulseMate, an AI-powered cardiology chatbot utilizing large language models, and ImaginAIry, a text-to-image generation app built with Stable Diffusion XL. These projects honed my technical expertise in Python, TensorFlow, PyTorch, and optimization algorithms for real-world applications.

In addition, my Practical AI with Python certification reflects my dedication to advancing my skills in AI and optimization, while my Japanese proficiency (JLPT N3) enables me to collaborate effectively in a Japanese academic setting.

What excites me most about your research is its focus on evolutionary algorithms and their applications in solving complex optimization problems, including black-box optimization and reinforcement learning-based decision-making. Your exploration of topics such as natural evolution strategies, population dynamics, and the optimization of design problems inspires me to contribute to the development of robust, efficient algorithms that address real-world challenges.

Under your guidance, I hope to explore innovative optimization techniques and contribute to your lab’s impactful work by leveraging my expertise in machine learning frameworks, computational modeling, and algorithm design.

Thank you for considering my application. I would be honored to discuss how my skills and experiences align with your research objectives. I look forward to the opportunity to collaborate and learn under your esteemed mentorship.

**Best Regards,**

Krish Bakshi