Dear Professor TUCHIYA Takahiro – sensei,

I hope this email finds you well.

I am Krish Bakshi, currently pursuing my Bachelor’s degree in Computer Engineering at Savitribai Phule Pune University, India, expected to graduate in June 2025. I am writing to express my keen interest in contributing to your research lab and applying for the master's program at the University of Aizu for the Fall/September 2025 intake, under your esteemed guidance.

I am deeply impressed by your research in Forward-backward stochastic differential equations (FBSDEs), Theory of computation of (FB)SDEs and the applications. In particular, machine learning and Stochastic Differential Equations, as well as your current research publication in “Fully coupled drift-less Forward and backward Stochastic Differential Equations in a degenerate case” - —resonate strongly with my academic interests and professional aspirations.

In my academic and professional experiences, I have developed robust technical skills in Python, SQL, C/C++, and a variety of data science frameworks including PySpark, Pandas, TensorFlow, and PyTorch. As a Data Science Intern at Profcess, I contributed to designing scalable data pipelines and implementing predictive models, which has honed my ability to extract actionable insights from large datasets. My hands-on experience with big data analytics, coupled with my keen interest in innovative service composition and data mining techniques, makes me excited about the possibility of contributing to your research projects.

I believe that my background and technical expertise will allow me to add significant value to your lab’s ongoing research, while also furthering my own understanding and skills in this cutting-edge field.

In addition to my technical skills, my proficiency in English and intermediate Japanese (JLPT N3) enables me to collaborate effectively in a multicultural and interdisciplinary environment.

I would be honoured to contribute to the innovative research in your lab and refine my skills under your guidance. I am also keen to learn more about your expectations for prospective Master’s students and the application process.

Please find my resume attached for your review. I would welcome the opportunity to discuss my application and potential research contributions with you further. Thank you very much for your time and consideration.

Sincerely,

Krish Bakshi