

## Profile and Skills

Hirofumi is currently a Ph.D. candidate at the Institute of Statistical Mathematics, working under the supervision of Prof. Kengo Kamatani.




He holds Japanese citizenship and is a native speaker of Japanese and Chinese. Additionally, He is fluent in English.

Hirofumi codes in Python, R, and Julia.



## Research Interests

- ✔ Monte Carlo methods, including Markov Chain Monte Carlo and Sequential Monte Carlo.
- ✔ Stochastic processes, including Markov processes and Stochastic Differential Equations.
- ✔ Machine Learning and Bayesian statistics, including Bayesian deep learning and multilevel modeling.

## Work Experience

-  **Research Assistant.** *The Institute of Statistical Mathematics, Tokyo, Japan.* 2023.7 – today  
Contributed to the R package YUIMA, an open-source project aiming to simulate and infer multidimensional stochastic differential equations, with an emphasis on Bayesian inference.
-  **Cooperative Researcher.** *RCAST, the University of Tokyo, Japan.* 2023.4 – today  
Research on trustworthy AI and machine learning from the viewpoint of economic security.
-  **Data Scientist.** *IMIS Co., Ltd.* 2022.8 – 2024.1  
Provided statistical analysis and machine learning solutions for clients in the manufacturing industry.

## Education

-  **Ph.D. in Statistical Science.** *Graduate University for Advanced Studies, SOKENDAI, Tokyo, Japan.* 2023.4 – 2028.3  
Supervisor: Kengo Kamatani
-  **B.A. in Mathematics.** *The University of Tokyo, Japan.* 2019.4 – 2023.3