# Hirofumi Shiba



#### 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 Julia, Python, and R.

#### **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**

m 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.

**<u>iii</u>** 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 Superivsor: Kengo Kamatani

**B.A. in Mathematics**. The University of Tokyo, Japan.

2019.4 - 2023.3