

Hirofumi Shiba |



Hello!

My name is **Hirofumi Shiba**. Feel free to call me Hiro. I am an Applied Mathematics researcher, specializing in Bayesian Computation. I am currently a Ph.D. candidate at the [Institute of Statistical Mathematics](#) (ISM) in Japan, working with Prof. [Kengo Kamatani](#).

Keywords

- Monte Carlo Computation
- Probabilistic Modelling

Research Interests

My primary research focus is on developing more efficient, scalable and automatic sampling algorithms, such as Markov Chain Monte Carlo (MCMC) and Sequential Monte Carlo (SMC), by leveraging the insights from their continuous-time limits.

Education

- **Ph.D. in Statistical Science**

Graduate University for Advanced Studies, SOKENDAI, Tokyo, Japan
2023.4 - 2028.3 (expected)

- **B.A. in Mathematics**

University of Tokyo, Japan
2019.4 - 2023.3

Biography

He was born in Yokohama Japan in May 1999. He received his Bachelor of Science degree in Mathematics from the Univ. of Tokyo in 2023, where he was mentored by Prof. [Nakahiro Yoshida](#).

Expanding his study on statistical inference for stochastic processes, he is now further specializing in sampling methods and interacting particle methods under the supervision of Prof. [Kengo Kamatani](#).

He speaks, reads, and writes in Japanese, Mandarin Chinese, and English.

He also contributes to the [YUIMA package](#), an open-source project aiming to simulate and infer multidimensional stochastic differential equations.

Additionally, he is a cooperative researcher at [RCAST, the University of Tokyo](#), where he is engaged in a project that aims to build trustworthy AI systems and a robust semiconductor ecosystem from a policy perspective, incorporating uncertainty quantification as a key component.