

Futoshi Futami

Researcher at NTT Communication Science Laboratories
Kyoto, Japan

<https://futoshi-futami.github.io/>

Education

Ph.D. Graduate school of Frontier Science, the University of Tokyo Sep.2016 – Mar.2020
Supervisor: Masashi Sugiyama
Thesis title: Robust and Computationally-Efficient Approximate Bayesian Inference

M.S. Physics, Graduate school of Science, the University of Tokyo Apr.2013 – Mar.2015
Supervisor: Seiji Miyashita
Thesis title: Static and dynamical properties of magnetic order in small world networks

B.A. Physics, the University of Tokyo Apr.2009 – Mar.2013

Employment

Researcher Apr. 2020 -
NTT Communication Science Laboratories

Research Internship June. 2019 - Sep. 2019
Google Brain at Mountain View

Research Internship Sep. 2018 - Dec. 2018
Microsoft Research Asia

Research Assistant Apr. 2017 – Mar. 2020
RIKEN Center for Advanced Intelligence Project

Staff in Planning division Apr.2015 – Dec.2016
Financial Services Agency, Japanese Government

Awards & Funding

1. Dean's Award for Outstanding Achievement Doctoral Course Graduate School of Frontier Sciences 2020
2. ACT-X: A research funding for excellent young researchers sponsored by Japan Science and Technology Agency (42000 USD) 2019
3. IEICE TC-IBISML Research Award, IEICE, Information-Based Induction Sciences and Machine Learning (IBISML) Technical Group 2018
4. Google PhD Fellowship (10000USD) 2018

5. AIP Prism Program : A research funding for excellent young researchers sponsored by Japan Science and Technology Agency (23000 USD) 2018
6. TOYOTA and DWANGO scholarship 2018 (12000 USD) 2018
7. TOYOTA and DWANGO scholarship 2017 (12000 USD) 2017
8. AIP Challenge Program : A research funding for excellent young researchers sponsored by JST (10000 USD) 2017
9. NIPS travel award (1000 USD) 2017
10. Workshop Travel award, Advances in Approximate Bayesian Inference (AABI) NIPS2017 (500 USD) 2017
11. Selected as a contributed talk at NIPS AABI workshop. 2017

Publications

Conference paper

1. **F. Futami**, I. Sato, & M. Sugiyama. Accelerating the diffusion-based ensemble sampling by non-reversible dynamics. International Conference on Machine learning, 2020. (ICML 2020)
2. **F. Futami**, Z. Cui, I. Sato, & M. Sugiyama. Bayesian posterior approximation via greedy particle optimization, Thirty-Third AAAI Conference on Artificial Intelligence. (AAAI-19)
3. **F. Futami**, I. Sato, & M. Sugiyama. Variational Inference based on Robust Divergences. In Artificial Intelligence and Statistics, 2018. (AISTATS 2018)
4. **F. Futami**, I. Sato, & M. Sugiyama. Expectation Propagation for t-exponential family using q-Algebra. In Neural Information Processing Systems, 2017. (Neurips 2017)

Workshops/Technical Reports

1. **F. Futami**, I. Sato, & M. Sugiyama Dec. 25-26, 2017
Expectation Propagation for t-exponential family using q-Algebra
Presented at ERATO Winter Festa Episode 3, Tokyo, Japan
2. **F. Futami**, I. Sato, & M. Sugiyama Dec. 8, 2017
Variational Inference based on Robust Divergences
Advances in Approximate Bayesian Inference, NIPS 2017 Workshop
3. **F. Futami**, I. Sato, & M. Sugiyama Jun. 23, 2017
Expectation Propagation for t-exponential family using q-Algebra
IEICE Technical Report, IBISML, Okinawa

Unpublished paper

1. H. Imamura, N. Charoenphakdee, **F. Futami**, I. Sato, J. Honda, & M. Sugiyama. Time-varying Gaussian Process Bandit Optimization with Non-constant Evaluation Time (<https://arxiv.org/abs/2003.04691>)

Talks

1. Invited talk at NTT communication science laboratories, Kyoto Apr. 5, 2019
2. AAAI-19, spotlight talk, search & constrained optimization, Hawaii Jan. 31, 2019

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| 3. Second International Workshop on Symbolic-Neural Learning, Nagoya | July. 5, 2018 |
| 4. Toshiba R&D Center, Media AI Department, Kanagawa. | Jan. 12, 2018 |
| 5. Graph-mining & WEB & AI seminar, National Institute of Informatics, Tokyo | Jan. 11, 2018 |
| 6. Advances in Approximate Bayesian Inference, NIPS 2017 Workshop | Dec. 8, 2017 |
| 7. The 20th Information-Based Induction Science Workshop (IBIS2017), Tokyo. | Nov. 8, 2017 |

Teaching

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| 1. Invited lecture at RIKEN, Advanced Intelligence Project
Basics of machine learning | 2017, 2018 |
| 2. Teaching assistant, the University of Tokyo
Advanced course of statistical physics | 2013 |

Professional Service

Conference reviewing

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| 1. International Conference on Machine Learning | 2020 |
| 2. Neural Information Processing Systems | 2019 |
| 3. International Conference on Machine Learning | 2019 |
| 4. Neural Information Processing Systems | 2018 |
| 5. Association for the Advancement of Artificial Intelligence | 2018 |
| 6. International Conference on Learning Representations | 2018 |
| 7. Advances on Approximate Bayesian Inference | 2018 |

Journal reviewing

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| 1. Machine Learning | 2018- |
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