

Shogo Hayashi

#301, Research Bldg. No.7, Kyoto University
Yoshida-honmachi, Sakyo-ku, Kyoto
Postcode: 606-8501, Tel: 075-753-5966
Mail: hayashi@ml.ist.i.kyoto-u.ac.jp

SUMMARY

- Strength in mathematical formulation of real-world problems
- Working on machine learning research for 5 years
- Got 2 awards in machine learning conferences

EDUCATION

Ph.D. Student Apr. 2017 - Present
Department of Intelligence Science and Technology, Graduate School of Informatics,
Kyoto University, Japan
Research Topic: Bayesian Optimization, Change-Point Detection, Time-Series Data
Adviser: Hisashi Kashima

Master of Computer Science Mar. 2017
Department of Information and Physical Sciences, Graduate School of Information
Science and Technology, Osaka University, Japan
Master Thesis: Error Detection in Ocean Data Considering Spatial Autocorrelation
Adviser: Associate Prof. Ken-ichi Fukui

Bachelor of Engineering Mar. 2015
Applied Physics Course, School of Engineering, Osaka University, Japan
Bachelor Thesis: Viscoelasticity Measurement Using Brillouin Scattering Adviser:
Prof. Yasushi Inoue

RESEARCH EXPERIENCE

Research Assistant May 2017 - Present
Center for Advanced Intelligence Project (AIP), RIKEN

Research Fellowship Apr. 2018 - Mar. 2020
Japan Society for the Promotion of Science, Research Fellowship for Young Scientists
DC2

Research Intern Jul. 2018 - Oct. 2018
Probabilistic Numerics Group, Max Planck Institute for Intelligent Systems

Research Intern Oct. 2017 - Dec. 2017
Data Science Research Laboratory, NEC Corporation
Mentor: Akira Tanimoto

Engineer Intern Aug. 2013 - Oct. 2013
AlpacaDB Inc.

PUBLICATION

Refereed Journal
Shogo Hayashi, Akira Tanimoto, Hisashi Kashima: Long-Term Prediction of Small
Time-Series Data Using Generalized Distillation, *The Japanese Society for Artificial
Intelligence*, Vol. 35, Non. 5, pp. , 2020. (to be published)

Shogo Hayashi, Satoshi Ono, Shigeki Hosoda, Masayuki Numao, Ken-ichi Fukui: Error Detection in Ocean Data Considering Spatial Autocorrelation, *The Japanese Society for Artificial Intelligence*, Vol. 33, Non. 3, pp. D-SGAI02.1-10, 2018.

Refereed Conference

Shogo Hayashi, Yoshinobu Kawahara, Hisashi Kashima: Active Change-Point Detection, in *Proceedings of The Eleventh Asian Conference on Machine Learning*, pp.1017-1032, Nagoya, Japan, Nov. 2019. (acceptance rate: 31.2%)

Shogo Hayashi, Akira Tanimoto, Hisashi Kashima: Long-Term Prediction of Small Time-Series Data Using Generalized Distillation, in *Proceedings of International Joint Conference on Neural Networks*, Budapest, Hungary, July 14-19, 2019. (acceptance rate: 52.4%)

Shogo Hayashi, Satoshi Ono, Shigeki Hosoda, Masayuki Numao, Ken-ichi Fukui: Error Detection of Ocean Depth Series Data with Area Partitioning and Using Sliding Window, in *Proceedings of The 15th IEEE International Conference on Machine Learning and Applications*, pp.1029-1033, Anaheim, USA, Dec. 2016. (Acceptance rate: 31.98%)

Non-Refereed

林 勝悟, 鹿島 久嗣: 条件付き確率に従うクエリを用いたベイズ最適化, 第 22 回情報論的学習理論ワークショップ (IBIS), 名古屋, 2019 年 11 月. (in Japanese)

林 勝悟, 金川 元信, 鹿島 久嗣: ベイズ的測度最適化, 第 21 回情報論的学習理論ワークショップ (IBIS), 札幌, 2018 年 11 月. (in Japanese)

林 勝悟, 河原 吉伸, 鹿島 久嗣: 能動的変化点検知, 第 20 回情報論的学習理論ワークショップ (IBIS), 東京, 2017 年 11 月. (in Japanese)

林 勝悟, 小野 智司, 細田 滋毅, 沼尾 正行, 福井 健一: 空間的自己相関を考慮した海洋データのエラー検知, 第 31 回人工知能学会全国大会, 愛知県産業労働センター, 2017 年 5 月. (in Japanese)

Shogo Hayashi, Satoshi Ono, Shigeki Hosoda, Masayuki Numao, Ken-ichi Fukui: Error Detection of Ocean Depth Series Data with Area Partitioning and Using Sliding Window, Machine Learning Summer School, Arequipa, Peru, Aug. 2016.

林 勝悟, 小野 智司, 細田 滋毅, 沼尾 正行, 福井 健一: 近傍法による海洋深度系列データのエラー検知, 第 26 回インテリジェント・システム・シンポジウム, 大阪大学, 2016 年 10 月. (in Japanese)

林 勝悟, 小野 智司, 細田 滋毅, 沼尾 正行, 福井 健一: クラスタリングによる海洋データの構造視覚化, 情報処理学会 第 108 回数理モデル化と問題解決研究会, vol.2016-MPS-108, No.23, pp.1-6, 沖縄科学技術大学院大学, 2016 年 7 月. (in Japanese)

**HONOR AND
SCHOLARSHIP**

Student Presentation Award (学生優秀プレゼンテーション賞)

Nov. 2019

林 勝悟, 鹿島 久嗣: 条件付き確率に従うクエリを用いたベイズ最適化, 第 22 回情報論的学習理論ワークショップ (IBIS), 名古屋, 2019 年 11 月. (in Japanese)

Best Paper Award (最優秀論文賞) Oct. 2016
林 勝悟, 小野 智司, 細田 滋毅, 沼尾 正行, 福井 健一: 近傍法による海洋深度系列データのエラー検知, 第 26 回インテリジェント・システム・シンポジウム, 大阪大学, 2016 年 10 月. (in Japanese)

Scholarship Apr. 2015 - Mar. 2017
Cross-Boundary Innovation Program, Osaka University

SKILL

- Programming Language: Python, Java
- English: Fluent (IELTS Band Score 5.5, Nov. 2016.)
- Japanese: Native

OTHER ACTIVITIES

- Machine Learning Summer School, Arequipa, Peru (2-13 Aug. 2016)
- Field Study, Marshall Islands (2 weeks, May 2016)
- Study Abroad, Monash University (Aug. 2015)
- Field Study, Bangladesh (2 weeks, Aug. 2013)
- Field Study, the Phillipines (2 weeks, Mar. 2012)