

# Makoto Yamada

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RESEARCH INTERESTS    **Machine Learning:** Explainable AI, selective inference, causal inference, optimal transport, and transfer learning.  
**Science:** Drug discovery for Acute Myeloid Leukemia.

EDUCATION     $\diamond$  *Ph.D.* in Statistical Science, March 2010, The Graduate University for Advanced Studies, Japan.  
 $\diamond$  *M.S.* in Electrical Engineering, May 2005, Colorado State University, U.S.A.  
 $\diamond$  *B.S.* in Computer Science, Mar 2003, University of Aizu, Japan.

ACADEMIC EXPERIENCE     $\diamond$  *Okinawa Institute of Science and Technology*, Okinawa, Japan.  
Associate Professor    *August, 2022-present*

$\diamond$  *Kyoto University*, Kyoto, Japan  
Associate Professor    *April, 2018 - March, 2023*

$\diamond$  *RIKEN AIP center*, Tokyo Japan  
Team Leader (PI, equivalent to professor)    *March, 2020 - March, 2023*

$\diamond$  *RIKEN AIP center*, Tokyo Japan  
Unit Leader (PI, equivalent to associate professor)    *March, 2017 - 2020*

$\diamond$  *Institute of Statistical Mathematics (ISM)*, Tokyo Japan  
Visiting Associate Professor    *2018 - present*

$\diamond$  *Kyoto University*, Kyoto, Japan  
Assistant Professor    *October, 2015 - February, 2017*

$\diamond$  *Tokyo Institute of Technology*, O-okayama, Tokyo Japan  
Postdoctoral Fellow    *April, 2010 - June, 2012*

INDUSTRY EXPERIENCE     $\diamond$  *Yahoo Labs*, Sunnyvale USA  
Research Scientist    *July, 2013 - October, 2015*

$\diamond$  *NTT Communication Science Laboratory*, Kyoto Japan  
Research Associate    *July, 2012 - June, 2013*

$\diamond$  *Yamaha Corporation*, Iwata, Shizuoka Japan  
Research Engineer    *July, 2007 - March, 2010*

$\diamond$  *Hitachi Corporation*, Hitachinaka, Ibaraki, Japan  
System Engineer    *July, 2005 - June, 2007*

PUBLICATION    Journal articles: Please note that TPAMI and IJCV are highly competitive top-tier computer vision journals. MLJ and NECO are competitive top-tier machine learning journals.

1. Takezawa, Y., Niwa, K., **Yamada, M.**. Communication compression for decentralized learning with operator splitting methods. *IEEE Transactions on Signal and Information Processing over Networks*. 2023.
2. Liu, Y., Dwivedi, G., Boussaid, F., Sanfilippo, F., **Yamada, M.**, Bennamoun, M. Inflating 2D Convolution Weights for Efficient Generation of 3D Medical Images. *Computer Methods and Programs in Biomedicine*,107685. 2023.

3. Liu, Y., Zhu, L., Wang, X., **Yamada, M.**, Yang, Y. Bilaterally-normalized Scale-consistent Sinkhorn Distance for Few-shot Image Classification. *IEEE Transactions on Neural Networks and Learning Systems*. 2023.
4. Climente-Gonzlez, H., Azencott, C., **Yamada, M.**, A network-guided protocol to discover susceptibility genes in genome-wide association studies using stability selection *STAR Protocols*, 2023.
5. **Yamada, M.**, Takezawa, Y., Sato, R., Bao, H., Kozareva, Z., Ravi, S. Approximating 1-Wasserstein distance with trees. *Transaction on Machine Learning Research (TMLR)*, 2022.
6. Huang, Q., **Yamada, M.**, Tian, Y., Singh, D., Yin, D., Chang, Y. GraphLIME: Local Interpretable Model Explanations for Graph Neural Networks. *IEEE Transactions on Knowledge and Data Engineering (TKDE)* 2022.
7. Sato, R., **Yamada, M.**, Kashima, H. Poincare: Recommending Publication Venues via Treatment Effect Estimation. *Journal of Information* 2022.
8. Sato, R., **Yamada, M.**, Kashima, H. Constant time graph neural networks. *The ACM Transactions on Knowledge Discovery from Data (TKDD)* 2022.
9. Hashimoto, M., Saito, Y., Nakagawa, R., Ogahara, I., Takagi, S., Takata, S., Amitani, H., Endo, M., Yuki, H., Ramilowski, J. A., Severin, J., Manabe, R., Watanabe, T., Ozaki, K., Kaneko, A., Kajita, H., Fujiki, S., Sato, K., Honma, T., Uchida, N., Fukami, T., Okazaki, Y., Ohara, O., Shultz, L. D., **Yamada, M.**, Taniguchi, S., Vyas, P., Hoon, M., Momozawa, Y., Ishikawa, F. Combined inhibition of XIAP and BCL2 drives maximal therapeutic efficacy in genetically diverse aggressive Acute Myeloid Leukemia. *Nature Cancer* 2021.
10. Takahashi, Y., Ueki, M., **Yamada, M.**, Tamiya, G., Motoike, I., Saigusa, D., Sakurai, M., Nagami, F., Ogishima, S., Koshihara, S., Kinoshita, K., Yamamoto, M., Tomita, H. Improved metabolomic data-based prediction of depressive symptoms using nonlinear machine learning with feature selection. *Translational Psychiatry* volume 10, Article number: 157 (2020)
11. Wimalawarne, K., **Yamada, M.**, Mamitsuka, H., Scaled Coupled Norms and Coupled Higher-Order Tensor Completion. *Neural Computation*, 32(2): 447-484 (2020).
12. Saito, Y., Shin, K., Terayama, K., Desai, S., Onga, M., Nakagawa, Y., Itahashi, Y.M., Iwasa, Y., **Yamada, Y.**, Tsuda, K. Deep-learning-based quality filtering of mechanically exfoliated 2D crystals *npj Computational Materials*, volume 5, Article number: 124 (2019)
13. Climente-Gonzlez, H., Azencott, C-A., Kaski, S., **Yamada, M.**, Block HSIC Lasso: model-free biomarker detection for ultra-high dimensional data. *Bioinformatics*. 35(14): i427-i435 (2019).
14. Isozaki, A., Mikami, H., Hiramatsu, K., Sakuma, S., Kasai, Y., Iino, T., Yamano, T., Yasumoto, A., Oguchi, Y., Suzuki, N., Shirasaki, Y., Endo, T., Ito, T., Hiraki, K., **Yamada, M.**, Matsusaka, S., Hayakawa, T., Fukuzawa, H., Yatomi, Y., Arai, F., Di Carlo, D., Nakagawa, A., Hoshino, Y., Hosokawa, Y., Uemura, S., Sugimura, T., Ozeki, Y., Nitta, N., Goda, K. A practical guide to intelligent image-activated cell sorting. *Nature Protocols*, 14, pages23702415(2019).
15. Kobayashi, H., Lei, C., Wu, Y., Huang, C-J., Yasumoto, A., Jona, M., Li, W., Wu, Y., Yalikun, Y., Jiang, Y., Guo, B., Sun, C-W., Tanaka, Y., **Yamada, M.**, Yatomi, Y., Goda, K. Intelligent whole-blood imaging flow cytometry for simple, rapid, and cost-effective drug-susceptibility testing of leukemia, *Lab on a Chip*, 2019.
16. Heewon Park, Makoto Yamada, Seiya Imoto, Satoru Miyano: Robust Sample-Specific Stability Selection with Effective Error Control. *J. Comput. Biol.*, 26(3): 202-217 (2019)

17. Lei, C., Kobayashi, H., Wu, Yi., Li, Ming., Isozaki, A., Yasumoto, A., Mikami, H., Ito, T., Nitta, N., Sugimura, T., **Yamada, M.**, Yatomi, Y., Di Carlo, D., Ozeki, Y., Goda, K High-throughput imaging flow cytometry by optofluidic time-stretch microscopy, *Nature protocols*, 13, pages16031631(2018).
18. Nitta, N., Sugimura, T., Isozaki, A., Mikami, H., Hiraki, K., Sakuma, S., Iino, T., Arai, F., Endo, T., Fujiwaki, Y., Fukuzawa, H., Hase, M., Hayakawa, T., Hiramatsu, K., Hoshino, Y., Inaba, M., Ito, T., Karakawa, H., Kasai, Y., Koizumi, K., Lee, S., Lei, C., Li, M., Maeno, T., Matsusaka, S., Murakami, D., Nakagawa, A., Oguchi, Y., Oikawa, M., Ota, T., Shiba, K., Shintaku, H., Shirasaki, Y., Suga, K., Suzuki, Y., Suzuki, N., Tanaka, Y., Tezuka, H., Toyokawa, C., Yalikul, Y., **Yamada, M.**, Yamagishi, M., Yamano, T., Yasumoto, A., Yatomi, Y., Yazawa, M., Di Carlo, D., Hosokawa, Y., Uemura, S., Ozeki, Y., Goda, K. Intelligent Image-Activated Cell Sorting. *Cell*, 175(1):266-276.
19. Wang, Y., Yin, D., Jie, L., Wang, P., **Yamada, M.**, Chang, Y., Mei, Q., Optimizing Whole-Page Presentation for Web Search. *Trans on WEB*, 12(3): 19:1-19:25 (2018).
20. Wimalawarne, K., **Yamada, M.**, Mamitsuka, H., Convex Coupled Matrix and Tensor Completion. *Neural Computation*, 30(11) (2018).
21. **Yamada, M.**, Tang, J., Lugo-Martinez, J., Hodzic, E., Shrestha, R., Saha, A., Ouyang, H., Yin, D., Mamitsuka, H., Sahinalp, C., Radivojac, P., Menczer, F., Chang, Y. Ultra High-Dimensional Nonlinear Feature Selection for Big Biological Data. *IEEE Transactions on Knowledge and Data Engineering*, 30(7): 1352-1365 (2018).
22. Chang, Y. , **Yamada, M.**, Ortega, A., and Liu, Y., Lifecycle Modeling for Buzz Temporal Pattern Discovery, *TKDD*, 11(2): 20:1-20:24 (2016).
23. **Yamada, M.**, Sigal, L., Raptis, M., Toyoda, M., Chang, Yi., and Sugiyama, M., Cross-Domain Matching with Squared-Loss Mutual Information, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol.37, no.9, pp.1764-1776, 2015.
24. **Yamada, M.**, Sigal, L., and Chang, Y., Domain Adaptation for Structured Prediction, *International Journal of Computer Vision*, vol. 109, 126-145, 2014.
25. Niu, G., Dai, B., **Yamada, M.**, and Sugiyama, M., Information-theoretic Semi-supervised Metric Learning via Entropy Regularization, *Neural Computation*, vol.26, no.8, pp.1717-1762, 2014.
26. **Yamada, M.**, Sugiyama, M., and Sese, J., Least-Squares Independence Regression for Non-linear Causal Inference under Non-Gaussian Noise, *Machine Learning*. vol.96, no.3, pp.249-267, 2014.
27. **Yamada, M.**, Sigal, L., and Raptis, M., Covariate Shift Adaptation for Discriminative 3D Pose Estimation, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 36, no.2, 235–247, 2014.
28. **Yamada, M.**, Jitkrittum, W., Sigal, L., Xing, E.P., and Sugiyama, M., High-Dimensional Feature Selection by Feature-Wise Kernelized Lasso, *Neural Computation*, vol.26, no.1, pp.185-207, 2014.
29. Sugiyama, M., Niu, G., **Yamada, M.**, Kimura, M., and Hachiya, H., On Information Maximization Clustering: Tuning Parameter Selection and Analytic Solution, *Neural Computation*, vol.26, no.1, pp.84-131, 2014.
30. Sugiyama, M., **Yamada, M.**, and du Plessis, M. C., Learning under non-stationarity: Covariate shift and class-balance change, *WIREs Computational Statistics*, 13 pages, 2013.
31. Sugiyama, M., Liu, S., M. C. du Plessis, M. Yamanaka, **Yamada, M.**, Suzuki, T., and Kanamori, T., Direct Divergence Approximation between Probability Distributions and Its Applications in Machine Learning, *JSCE*, 7(2), pp.99–111, 2013.

32. **Yamada, M.**, Suzuki, T., Kanamori, T., Hachiya, H., and Sugiyama, M., Relative Density-Ratio Estimation for Robust Distribution Comparison, *Neural Computation*, vol.25, no.5, pp.1324-1370, 2013.
33. Liu, S., **Yamada, M.**, Colliar, N., and Sugiyama, M., Change-Point Detection in Time-Series Data by Relative Density-Ratio Estimation, *Neural Networks*, vol.43, pp.72-83, 2013.
34. **Yamada, M.**, Wichern, G., Kondo, K., Sugiyama, M., and Sawada, H., Noise Adaptive Unmixing Matrix Initialization, *Digital Signal Processing*, vol.23, 1-8, 2013.
35. Sugiyama, M. and **Yamada, M.**, On kernel parameter selection in Hilbert-Schmidt independence criterion, *IEICE Transactions on Information and Systems*, vol.E95-D, no.10, pp.2564-2567, 2012.
36. **Yamada, M.**, Sugiyama, M., Wichern, G., and Simm, J., Improving the Accuracy of Least-Squares Probabilistic Classifiers, *IEICE Transactions on Information and Systems*, vol.E94-D No.6 pp.1337-1340.
37. Sugiyama, M., **Yamada, M.**, Bünauf, P. von., Suzuki, T., Kanamori, T., and Kawanabe, K., Direct Density-ratio Estimation with Dimensionality Reduction via Least-squares Hetero-distributional Subspace Search, *Neural Networks*, vol.24, no.2, pp.183-198, 2011.
38. **Yamada, M.**, Sugiyama, M., Wichern, G., and Simm, J., Direct Importance Estimation with Generative Models, *IEICE Transactions on Information and Systems*, vol. E93-D, no.10, pp.2846-2849, 2010.
39. **Yamada, M.**, Sugiyama, M., and Matsui, T., Semi-supervised Speaker Identification under Covariate Shift, *Signal Processing*, vol. 90, no.8, pp.2353-2361, 2010.
40. **Yamada, M.** and Sugiyama, M., Direct Importance Estimation with Gaussian Mixture Model, *IEICE Transactions on Information and Systems*, vol. E92-D, no.10, pp.2159-2162, 2009.

## International Conference paper (Reviewed)

41. Singh, D., Climente-Gonzalez, H., Petrovich, M., Kawakami, E., **Yamada, M.** Fs-Net: Feature selection network on high-dimensional biological data. *IJCNN*. 2023.
42. Fiorucci, M., Naylor, P., **Yamada, M.** Optimal Transport for Change Detection on LiDAR Point Clouds. *IGARSS*. 2023.
43. Liu, W. Xie, J., Zhang, C. **Yamada, M.**, Zheng, N., Qian, H. Robust Graph Dictionary Learning. *ICLR* 2023.
44. Hataya, R. and **Yamada, M.** Nystrom Method for Accurate and Scalable Implicit Differentiation *AISTATS* 2023.
45. Sato, R., **Yamada, M.**, Kashima, H. Twin Papers: A Simple Framework of Causal Inference for Citations via Coupling. *CIKM* 2022 (short).
46. Petrovich, M., Liang, C., Liu, Y., Tsai, Y-H-H, Zhu, L., Yang, Y., Salakhutdinov, R., **Yamada, M.** Feature Robust Optimal Transport for High-dimensional Data. *ECML* 2022.
47. Chikahara, Y., **Yamada, M.**, Kashima, H. Feature Selection for Discovering Distributional Treatment Effect Modifiers. *UAI* 2022.
48. Sato, R., **Yamada, M.**, Kashima, H. Re-evaluating Word Movers Distance. *ICML* 2022.
49. Takezawa, Y., Sato, R., Kozareva, Z., Ravi, S., **Yamada, M.** Fixed Support Tree-Sliced Wasserstein Barycenter. *AISTATS* 2022
50. Poinard, B., Naylor, P., Climente-Gonzalez, H., **Yamada, M.** Feature Screening with Kernel Knockoff. *AISTATS* 2022.

51. Yamada, H., **Yamada, M.** Dynamic Sasvi: Strong Safe Screening for Norm-Regularized Least Squares. *NeurIPS 2021*
52. Le, T., Nguyen, T., **Yamada, M.**, Blanchet, J., Nguyen, V.A. Adversarial Regression with Doubly Non-negative Weighting Matrices. *NeurIPS 2021*
53. Liu, Y., **Yamada, M.**, Tsai, Y-H-H, Le, T., Salakutdinov, R., Yang, Y. LSMI-Sinkhorn: Semi-supervised Squared-Loss Mutual Information Estimation with Optimal Transport. *ECML 2021*.
54. Takezawa, Y., Sato, S., **Yamada, M.** Supervised Tree-Wasserstein Distance. *ICML, 2021*.
55. Freidling, T., Poignard, B., Climente-Gonzalez, H., **Yamada, M.** Post-selection inference with HSIC-Lasso. *ICML 2021*.
56. Nguyen, V., Le, T., **Yamada, M.**, Osborne, M.A.. Optimal Transport Kernels for Sequential and Parallel Neural Architecture Search. *ICML 2021*.
57. Sato, R., **Yamada, M.**, Kashima, H. Random Features Strengthen Graph Neural Networks, *SDM, 2021*.
58. Le, T., Ho, N., **Yamada, M.** Fast Tree Variants of Gromov-Wasserstein. *AISTATS, 2021*.
59. Sato, R., **Yamada, M.**, Kashima, H., Fast Unbalanced Optimal Transport on a Tree. *NeurIPS, 2020*
60. Tsai, Y-H-H., Zhao, H., **Yamada, M.**, Morency, L-P., Salakhutdinov, R., Neural Methods for Point-wise Dependency Estimation. *NeurIPS, 2020*
61. Liu, Y., Zhu, L., **Yamada, M.**, Yang, Y. Semantic Correspondence as an Optimal Transport Problem. *CVPR, 2020*.
62. Shiraishi, T., Le, T., Kashima, H., **Yamada, M.**. Topological Bayesian Optimization with Persistence Diagrams. *ECAI, 2020*.
63. Poignard, B., **Yamada, M.** Sparse Hilbert-Schmidt Independence Criterion Regression. *AISTATS, 2020*.
64. Lim, J., **Yamada, M.**, Jitkrittum, W., Terada, Y., Matsui, S., Shimodaira, H. More Powerful Selective Kernel Tests for Feature Selection. *AISTATS, 2020*.
65. Huang, Q., Xia, T., Sun, H., **Yamada, M.**, Chang, Y. Unsupervised Nonlinear Feature Selection from High-dimensional Signed Networks. *AAAI 2020*.
66. Sato, R., **Yamada, M.**, Kashima, H. Approximation Ratios of Graph Neural Networks for Combinatorial Problems. *NeurIPS, 2019*.
67. Le, T., **Yamada, M.**, Fukumizu, K., Cuturi, M. Tree-Sliced Variants of Wasserstein Distances. *NeurIPS, 2019*.
68. Lim, J., **Yamada, M.**, Schoelkopf, B., Jitkrittum, W. Kernel Stein Tests for Multiple Model Comparison. *NeurIPS, 2019*.
69. Sato, R., **Yamada, M.**, Kashima, H. Learning to Sample Hard Instances for Graph Algorithms. *ACML, 2019*.
70. Tsai Y-H-H., Bai, S., **Yamada, M.**, Morency, L-P., Salakhutdinov, R. Empirical Study of Transformer’s Attention Mechanism via the Lens of Kernel. *EMNLP-IJCNLP, 2019*.
71. Harada, S., Taniguchi, K., **Yamada, M.**, Kashima, H. Context-Regularized Neural Collaborative Filtering for Game App Recommendation. *ACM RecSys LBR track, 2019*.
72. Tanaka D., **Yamada, M.**, Kashima, H., Kishikawa, T., Haga, T., Sasaki, T. In-Vehicle Network Intrusion Detection and Explanation Using Density Ratio Estimation. *ITSC, 2019*.

73. Harada, S., Taniguchi, K., **Yamada, M.**, Kashima, H. In-app Purchase Prediction Using Bayesian Personalized Dwell Day Ranking. *AdKDD* 2019.
74. **Yamada, M.**, Wu, D., Tsai Y-H-H., Hirofumi Ota, Salakhutdinov, R., Takeuchi, I Fukumizu, K. Post Selection Inference with Incomplete Maximum Mean Discrepancy Estimator. *ICLR*, 2019.
75. Le, T., **Yamada, M.**, Persistence Fisher Kernel: A Riemannian Manifold Kernel for Persistence Diagrams. *NeurIPS*, 2018.
76. Mukherjee, T., **Yamada, M.**, Hospedales, T. Learning Unsupervised Word Translations Without Adversaries. *EMNLP*, 2018.
77. Kikui, K., Itoh, Y., **Yamada, M.**, Sugiura, Y. Sugimoto, M. Intra-/Inter-user Adaptation Framework for Wearable Gesture Sensing Device. *ISWC*, 2018.
78. **Yamada, M.**, Umezu, Y., Fukumizu, K., Takeuchi, I. Post Selection Inference with Kernels. *AISTATS*, 2018.
79. **Yamada, M.**, Lian, W, Goyal, Amit, Chen, J. Wimalawarne, K., Khan, S. A., Kaski, S., Mamitsuka, H., Chang, Y, Convex Facotrization Machine for Toxicogenomics Prediction. *KDD*, 2017.
80. **Yamada, M.**, Takeuchi, K., Iwata, T., Shawe-Taylor, J., and Kaski, S., Localized Lasso for High-dimensional Regression, *AISTATS*, 2017.
81. Iwata, T., **Yamada, M.** Multi-view Anomaly Detection via Robust Probabilistic Latent Variable Models. *NIPS*, 2016.
82. Kozareva, Z. **Yamada, M.** Which Tumblr Post Should I Read Next?, *ACL*, 2016.
83. Chang, Y., Tang, J., Yin, D., **Yamada, M.**, Liu, Y. Timeline Summarization with Publications Life Cycle Models, *IJCAI*, 2016.
84. Gao, J., **Yamada, M.**, Kaski, S., Mamitsuka, H., Zhu, S. A Robust Convex Formulation for Ensemble Clustering, *IJCAI*, 2016.
85. Wang, Y., Yin, D., Luo, J., Wang, P., **Yamada, M.**, Chang, Y., Mei, Q. Beyond Ranking: Optimizing Whole-Page Presentation. *WSDM*, 2016. (Best Paper Award).
86. Gunasekar, S., **Yamada, M.**, Yin, D., and Chang, Y., Consistent Collective Matrix Completion under Joint Low Rank Structure, *AISTATS*, 2015.
87. Chang, Y. , **Yamada, M.**, Ortega, A., and Liu, Y., Ups and Downs in Buzzes: Life Cycle Modeling for Temporal Pattern Discovery, *ICDM*, 2014.
88. Marcos, A. M., **Yamada, M.**, Kimura, A., and Iwata, T., Clustering-Based Anomaly Detection in Multi-View Data , *CIKM*, 2013.
89. Kimura, A., Ishiguro, K., Marcos, A. M., Kataoka, K., Murasaki, K., and **Yamada, M.**, Image context discovery from socially curated contents, *ACMMM*, 2013.
90. **Yamada, M.**, Kimura, A., Naya, F., and Sawada, H., Change-Point Detection with Feature Selection in High-Dimensional Time-Series Data, *IJCAI*, 2013.
91. Liu, S., **Yamada, M.**, Colliar, N., and Sugiyama, M., Change-Point Detection in Time-Series Data by Relative Density-Ratio Estimation, *SPR*, 2012.
92. **Yamada, M.**, Sigal, L., and Raptis, M., No Bias Left Behind: Covariate Shift Adaptation for Discriminative 3D Pose Estimation, *ECCV*, 2012.
93. Niu, G., Dai, B., **Yamada, M.**, and Sugiyama, M., Information-theoretic Semi-supervised Metric Learning via Entropy Regularization, *ICML*, 2012.
94. Sugiyama, M., Hachiya, H., **Yamada, M.**, Simm, J., and Nam, H., Least-squares probabilistic classifier: A computationally efficient alternative to kernel logistic regression, *IWSML*, 2012.

95. **Yamada, M.**, Suzuki, T., Kanamori, T., Hachiya, H., and Sugiyama, M., Relative Density-Ratio Estimation for Robust Distribution Comparison, *NIPS*, 2011.
96. **Yamada, M.**, Niu, G., Takagi, J., and Sugiyama, M., Computationally Efficient Sufficient Dimension Reduction via Squared-Loss Mutual Information, *ACML*, 2011.
97. **Yamada, M.** and Sugiyama, M., Direct Density-Ratio Estimation with Dimensionality Reduction via Hetero-Distributional Subspace Analysis, *AAAI*, 2011.
98. Sugiyama, M., **Yamada, M.**, Kimura, M., and Hachiya, H., On Information-Maximization Clustering: Tuning Parameter Selection and Analytic Solution, *ICML*, 2011.
99. **Yamada, M.** and Sugiyama, M., Cross-Domain Object Matching with Model Selection, *AISTATS*, 2011.
100. Takagi, J., Ohishi, Y., Kimura, A., Sugiyama, M., **Yamada, M.**, and Kameoka, H., Automatic Audio Tag Classification via Semi-Supervised Canonical Density Estimation, *ICASSP*, 2011.
101. **Yamada, M.** and Sugiyama, M., Dependence Minimizing Regression with Model Selection for Non-Linear Causal Inference under Non-Gaussian Noise, *AAAI*, 2010.
102. Wichern, G., **Yamada, M.**, Thornburg, H., Sugiyama, M. and Spanias, A., Automatic Audio Tagging using Covariate Shift Adaptation, *ICASSP*, 2010.
103. **Yamada, M.**, Sugiyama, M., and Wichern, G., Direct Importance Estimation with Probabilistic Principal Component Analyzers, *ICASSP*, 2010.
104. **Yamada, M.**, Sugiyama, M., Wichern, G., and Matsui, T., Acceleration of Sequence Kernel Computation for Real-time Speaker Identification, *ICASSP*, 2010.
105. Kondo, K., **Yamada, M.**, and Kenmochi, H., A Semi-blind Source Separation Method with A Less Amount of Computation Suitable for Tiny DSP Modules, *Interspeech*, 2009.
106. **Yamada, M.**, Sugiyama, M., and Matsui, T., Covariate shift adaptation for semi-supervised speaker identification, *ICASSP*, 2009.
107. **Yamada, M.** and Azimi-Sadjadi, M. R., Kernel Wiener Filter with Distance Constraint, *ICASSP*, 2006.
108. **Yamada, M.** and Azimi-Sadjadi, M. R., Nonlinear signal estimation using kernel Wiener filter in Canonical Correlation Analysis Framework, *CIMCA*, 2005.
109. **Yamada, M.**, Azimi-Sadjadi, M. R., and Cartmill, J., Buried Underwater Target Classification Using the New BOSS and Canonical Coordinate Decomposition Feature Extraction, *MTS/IEEE Oceans Conference*, 2005.
110. **Yamada, M.**, Pezeshki, A., and Azimi-Sadjadi, M. R., Relation between KCCA and KFDA, *IJCNN*, 2005.
111. **Yamada, M.** and Azimi-Sadjadi, M. R., Kernel Wiener Filter using Canonical Correlation Analysis Framework, *SSP*, 2005.

PROFESSIONAL  
ACTIVITIES

1. *Organizer* MLSS 2024 Okinawa
2. *WSDM cup chair* WSDM 2023
3. *Communication chair* ICML 2022
4. *Workflow chair* AISTATS 2019
5. *Publicity chair* WSDM 2018
6. *Senior Meta-reviewer* IJCAI 2020, 2021, AAAI 2021

7. *Meta-reviewer (Senior PC)* NeurIPS 2020-2023, ICML 2019-2021,2023, ICLR 2021, 2023, 2024, AISTATS 2020-2023, AAAI 2020, WWW 2020, WSDM 2018-2020,2022, IJCAI 2018, ACML 2019,2020, AIRS 2016
8. *Program Committee*, WWW 2015-2018, WSDM 2017, AISTATS 2014-2017, ICML 2017, ICANN 2011, IJCAI 2011-15, 2017, AAAI 2017, ACML 2010-2015, 2017, ECML 2016-2017, SIGIR 2016-2017, SDM 2017

HONORS AND  
AWARDS

1. IEICE TC-IBISML Research Award 2019
2. Outstanding SPC award, ACM International Conference on Web Search and Data Mining (WSDM 2020)
3. Outstanding SPC award, ACM International Conference on Web Search and Data Mining (WSDM 2019)
4. Best paper award, ACM International Conference on Web Search and Data Mining (WSDM 2016)
5. Yahoo Labs Excellence Award, 2014
6. Interactive Presentation Award, Meeting on Image Recognition and Understanding (MIRU2013)
7. IBISML Award Finalist in 2012, IEICE, Information-Based Induction Sciences and Machine Learning (IBISML) Technical Group
8. Honorable mention, Information-Based Induction Sciences (IBIS 2010)
9. Student Travel Grant, International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2009)

HONORS AND  
AWARDS  
(STUDENTS)

1. Tatsuya Shiraishi (JSAI Annual Conference Student Incentive Award 2019)
2. Ayato Toyokuni (JSAI Annual Conference Student Incentive Award 2020)
3. Ryoma Sato (IEICE TC-IBISML Research Award 2019)

RESEARCH  
GRANT

1. 2021 - 2025, Grant-in-Aid for Scientific Research (A), Japan Ministry of Education, Culture, Sports, Science and Technology. ¥ 4,000,000 for four years. (Co-PI)
2. 2021 - 2023, Marie Curie Individual Fellowship 2021 (Research host of Dr. Marco Fiorucci), €92,380.80
3. 2020 - 2024, Grant-in-Aid for Scientific Research (B), Japan Ministry of Education, Culture, Sports, Science and Technology. ¥ 13,600,000 for four years. (PI)
4. 2021, CyberAgent, ¥ 3,500,000 (Co-PI)
5. 2020, CyberAgent, ¥ 3,500,000 (Co-PI)
6. 2019, CyberAgent, ¥ 1,500,000 (Co-PI)
7. 2018 - 2021, RIKEN Engineering network ¥ 6,000,000 for three years. (Co-PI)
8. 2018 - 2021 Grant-in-Aid for Scientific Research (S), Japan Ministry of Education, Culture, Sports, Science and Technology. ¥ 6,000,000 for three years. (Co-PI)
9. 2016 - 2020, PRESTO (Synthesis of Knowledge for Information Oriented Society), Japan Science and Technology Agency. ¥ 35,600,000 for 3.5 years. (PI)
10. 2016 - 2018, Grant-in-Aid for Young Scientists (B), Japan Ministry of Education, Culture, Sports, Science and Technology. ¥ 1,950,000 for two years. (PI)

TEACHING  
RECORD



1. 2019, Introduction to Statistics (Japanese, undergraduate)
2. 2020,2021, Statistics and Artificial Intelligence (Japanese, undergraduate)
3. 2018-2021, Statistical Machine Learning Theory (English, graduate)

ADVISING  
AND COL-  
LABORATING  
STUDENTS

Staff scientist, Postdoc, technical staff

1. Mohammad Sabokrou (2023-)
2. Peter Naylor (2021-2023)
3. Héctor Climente (2020-2023)
4. Dinesh Singh (2019-2022) (Assistant professor at IIT Mandi.)
5. Jun Lu (2018)
6. Tam Le (2017-2022) (Assistant professor at ISM, Tokyo.)

Students at Kyoto University

1. Sho Otao (B.S.)
2. Yuki Takezawa (B.S.) *ICML 2021, AISTATS 2022*
3. Yuki Tomimura (B.S.)
4. Kohei Morita (B.S.)
5. Hiroaki Yamada (B.S.) *NeurIPS 2021*
6. Ayato Toyokuni (B.S.) *EACL SRW 2021*
7. Noeru Suzuki (B.S.)
8. Akito Seki (B.S., M.S.)
9. Kanata Satake (B.S., M.S.)
10. Tatsuya Shiraishi (B.S., M.S.) *ECAI 2020*
11. Ryoma Sato (B.S., M.S.) (Co-supervision with Prof. Kashima) *NeurIPS 2019, 2020, ICML 2021, ICML 2022*

Intern students

1. Tobias Freidling (2020, M.S. student Technical University of Munich. now Ph.D. student University of Cambridge) *ICML 2021*
2. Chao Liang (2020, Ph.D. student Zhejiang University)
3. Mathis Petrovich (2019-2020, M.S. student ENS, now Ph.D. student at Ecole des Ponts Paristech)
4. Qiang Huang (2019, M.S. student Jilin University), *AAAI 2020*
5. Shaoshen Wang (2019, Ph.D. student University of Technology Sydney)
6. Jennings Lim (2019, M.S. student UCL, now Ph.D. student at University of Warwick), *NeurIPS 2019, AISTATS 2020*
7. Hirofumi Ohta (Ph.D. student at Rutgers University), *ICLR 2019*
8. Yanbin Liu (2019, Ph.D. student University of Technology Sydney), *CVPR 2020, ECML 2021*
9. Ankesh Gupta (2019, undergraduate student at IIT Delhi)
10. Héctor Climente (2018, Ph.D. student Mines ParisTech), *ISMB 2019*
11. Anuj Dhawan (2018, undergraduate student at IIT Delhi)
12. Ziyin Liu (2018, undergraduate student at CMU, now Ph.D. student at University of Tokyo)
13. Jun Lu (2018, Technical staff)

14. Rui Zhang (2018, Ph.D. student Georgia Institute of Technology)
15. Liyan Xie (2018, Ph.D. student Georgia Institute of Technology)
16. Yu Saito (University of Tokyo, now postdoctoral researcher at UCSB)
17. Yao-Hung Hubert Tsai (2017, Ph.D. student at CMU), *ICLR 2019*, *EMNLP 2019*
18. Nataliya Polyakovska (Undergraduate student at Kharkiv National University) (Co-supervised by Max)
19. Tanmoy Mukherjee (2017, Ph.D. student at University of Edinburgh), *EMNLP 2018*
20. Denny Wu (2017, student at CMU, now Ph.D. student at Univeristy of Toronto) *ICLR 2019*
21. Junning Gao (2015, Ph.D. student at Fudan University), *IJCAI 2016*
22. Wenzhao Lian (2015, Ph.D. student at Duke University, now Google X), *KDD 2017*
23. Nurjahan Begum (2015, Ph.D. student at University of California Riverside)
24. Suriya Gunasekar (2014, Ph.D. student at University of Texas Austin, now Senior researcher MSR redmond), *AISTATS 2015*
25. Yue Wang (2014, Ph.D. student at University of Michigan, Ann Arbor, now assistnat professor at University of North Carolina), *WSDM 2016*
26. Alejandro Marcos Alvarez (2013, Ph.D. student at Universite de Liege), *CIKM 2013*