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Affiliations

Osaka University Guest Associate Professor	Osaka, Japan 2021–present
National Institute of Informatics Associate Professor	Tokyo, Japan 2016–present
The Graduate University for Advanced Studies, SOKENDAI Associate Professor	Tokyo, Japan 2016–present
The Otto-von-Guericke Universität Magdeburg Humboldt Research Fellow	Magdeburg, Germany 2015–2016
University of Canterbury Lecturer	Christchurch, New Zealand 2013–2015
The University of Tokyo Assistant Professor	Tokyo, Japan 2012
The University of Tokyo Project Researcher	Tokyo, Japan 2012
Massachusetts Institute of Technology Visiting Scholar	Cambridge, MA 2010–2012
University of Illinois at Urbana-Champaign Postdoctoral Research Associate	Urbana, IL 2010–2012

Education

University of Illinois at Urbana-Champaign Ph.D., Mechanical Engineering – Thesis: “Robust Optimal Boundary and Spatial Field Control of Distributed Parameter Systems”	Urbana, IL 2010
The University of Michigan, Ann Arbor M.S.E., Aerospace Engineering	Ann Arbor, MI 2006
The University of Michigan, Ann Arbor M.S., Applied and Interdisciplinary Mathematics	Ann Arbor, MI 2006
The University of Michigan, Ann Arbor B.S.E., Aerospace Engineering with minor in Mathematics	Ann Arbor, MI 2004

Honors and Awards

- The Young Scientists' Prize, The Commendation for Science and Technology by MEXT (令和2年度科学技術分野の文部科学大臣表彰 若手科学者賞) 2020
- Telecom System Technology Award, The Telecommunications Advancement Foundation (公益財団法人 電気通信普及財団 第34回テレコムシステム技術賞 奨励賞) 2019
- Discussant of the 2nd JSPS Japanese-American-German Frontiers of Science Symposium (第2回日米独先端科学シンポジウム参加研究者) 2019
- IEEE Senior Member 2018
- Humboldt Research Fellowship, Alexander von Humboldt Foundation 2015
- Best Presentation in Session, American Control Conference 2013
- Hanratty Travel Award, University of Illinois at Urbana-Champaign 2010
- Graduate College Travel Grant Award, University of Illinois at Urbana-Champaign 2008
- Schaller Travel Award, University of Illinois at Urbana-Champaign 2008
- Marian Sarah Parker Scholar, The University of Michigan, Ann Arbor 2003

Professional Affiliations

IEEE, SICE

Grants ((co-)PI only)

- CREST, JST (Lead Joint Researcher) 2020-2025
- Travel Grant, Tateisi Foundation (公益財団法人立石科学技術振興財団 2018年度前期国際交流助成) 2018
- Research Grant, Okawa Foundation (公益財団法人大川情報通信基金 2017年度研究助成) 2017
- Grant-in-Aid for Research Activity Start-up, Japan Society for the Promotion of Science (16H07412) (日本学術振興会平成28年度研究活動スタート支援) 2016
- International Aid, Yazaki Memorial Foundation for Science and Technology (公益財団法人矢崎科学技術振興記念財団 2016年度国際交流援助(中期)) 2016
- IEEE Registration Grant for Young Researchers for CDC 2015
- IEEE Student Travel Grants for MSC, ACC and CDC 2008-2010

Professional Service

Editorial board member

- IET Control Theory & Applications 2020 –present
- IEEE CSS Conference 2018 –present

Conference committees

- International Program Committee, 10th IFAC Symposium on Robust Control Design 2021
- Registration Co-Chair, IFAC 2023
- International Program Committee Technical Associated Editor, IFAC 2020
- Program Committee Member, American Control Conference 2015
- International Program Committee Member, IFAC Int. Symp. on Advanced Control of Chemical Processes 2015

- Technical Program Committee Member, 10th Asian Control Conference 2015

Session (Co-)Chair

- IEEE Conference on Decision and Control 2018, 2015, 2014, 2012
- American Control Conference 2017, 2013
- IFAC World Congress 2020

Award committee

- IFAC Journal of Process Control Paper Prize Selection Committee 2020

Technical Committees

Technical Committee on Optimal Control (Member, IFAC), Technical Committee on Robust and Complex Systems (Member, IEEE Control Systems Society), Technical Committee on Process Control (Member, IEEE Control Systems Society), SICE Research Committee on Cyber-Physical & Human System サイバーフィジカルと人間システム調査研究会 (2019-2020) SICE Research Committee on IoT時代に向けたイベントベース制御調査研究会 (2018-2019), SICE Research Committee on Fusion of Machine Learning and Dynamics in Model-Based Control, モデルベース制御における機械学習とダイナミクスの融合調査研究会 (2017-2018), SICE Research Committee on Control and System Design for Urban Infrastructures, 都市インフラシステム構築と制御調査研究会 (2016-2017)

Reviewer

IEEE Transactions on Automatic Control, Automatica, International Journal of Robust and Nonlinear Control, Optimal Control Applications & Methods, Computers and Chemical Engineering, American Control Conference, IEEE Conference on Decision and Control, IFAC Symposium on Dynamics and Control of Process, Computational and Mathematical Methods in Medicine Systems, European Control Conference, Asian Control Conference, IFAC International Symposium on Advanced Control of Chemical Processes, SICE Annual Conference

Misc.

- 計測自動制御学会 代議員 2021

Publications

Book Chapters

2. **M. Kishida** and Y. Hioka, "Circularly Moving Sensor for Use of Modulation Effect - CAROUSEL," In *Sensing Technology Current Status and Future Trends IV, Smart Sensors, Measurement and Instrumentation Volume 12*, Springer, pp.217-234, 2015.
1. **M. Kishida** and R. D. Braatz, "Internal model control," In *The Control Handbook*, 2nd edition, W. S. Levine, editor, CRC Press, Boca Raton, Florida, Chapter 9.7, 2010.

Referred Journal Articles

25. A. Cetinkaya and **M. Kishida**, "Impossibility results for constrained control of stochastic systems," *IEEE Transactions on Automatic Control*, 2022 (to appear)
24. K. Hashimoto, **M. Kishida**, Y. Yoshimura, T. Ushio, "A Bayesian optimization approach to decentralized event-triggered control," *IEICE*, Vol.E104-A, No.2, Feb. 2021
23. 八木聖太, 小蔵正輝, 岸田昌子, 木村達明, 林和則, "Geometric programによる送信電力制御アルゴリズムのロバスト安定化," *信学会和文論文誌B*, Vol. J103-B, No.12, 2020 (Robust Stabilization of Power Control Algorithm by Geometric Programming)

22. C. Zhao, M. Ogura, **M. Kishida** and A. Yassine, "Optimal resource allocation for dynamic product development process via convex optimization research in engineering design," *Research in Engineering Design*, <https://doi.org/10.1007/s00163-020-00346-5>
21. **M. Kishida**, M. Ogura, Y. Yoshida, and T. Wadayama, "Deep learning-based average consensus," *IEEE Access*, vol.8, pp.142404-142412, 2020. DOI:10.1109/ACCESS.2020.3014148
20. M. Ogura, **M. Kishida**, and J. Lam, "Geometric programming for optimal positive linear systems," *IEEE Transactions on Automatic Control*, vol.65, pp.4648-4663, 2020.
19. S. Kawamura, K.Cai, and **M. Kishida**, "Distributed output regulation of heterogeneous uncertain linear agents," *Automatica*, vol. 119, 109094, 2020.
18. K. Hashimoto, A. Saoud, **M. Kishida**, T. Ushio and D. V. Dimarogonas, "A symbolic approach to the self-triggered design for networked control systems," *IEEE Control Systems Letters*, vol. 3, pp. 1050-1055, 2019.
17. M. Ogura, J. Harada, **M. Kishida** and A. Yassine, "Resource optimization of product development projects with time-varying dependency structure," *Research in Engineering Design*, vol. 30, pp. 435-452, 2019.
16. **M. Kishida**, "Event-triggered control with self-triggered sampling for discrete-time uncertain systems," *IEEE Transactions on Automatic Control*, vol. 64, pp. 1273-1279, 2019.
15. **M. Kishida**, "Encrypted control system with quantizer," *IET Control Theory & Applications*, vol. 13, pp. 146-151, 2019.
14. **M. Kishida**, "On problems involving eigenvalues for uncertain matrices by structured singular values," *IEEE Transactions on Automatic Control*, vol. 62, pp. 6657-6663, 2017.
13. **M. Kishida**, M. Koegel, and R. Findeisen, "Combined event- and self-triggered control approach with guaranteed finite-gain L_2 stability for uncertain linear systems," *IET Control Theory & Applications*, vol. 11, pp. 1674-1683, 2017.
12. **M. Kishida**, "Approaches to determining a box consistent parameter set for polytopic output constraints on linear fractional models using structured singular values," *IEEE Transactions on Automatic Control*, vol. 62, pp. 1417-1423, 2017.
11. **M. Kishida**, "On computations of variance, covariance and correlation for interval data," *Mechanical Systems and Signal Processing*, vol. 84, pp. 462-468, 2017.
10. S. Streif, K. Kim, P. Rumschinski, **M. Kishida**, D. E. Shen, R. Findeisen and R. D. Braatz, "Robustness analysis, prediction, and estimation for uncertain biochemical networks: An overview," *Journal of Process Control*, vol. 42, pp. 14-34, 2016.
9. **M. Kishida** and R. D. Braatz, "On the analysis of the eigenvalues of uncertain matrices by μ and ν : Applications to bifurcation avoidance and convergence rates," *IEEE Transactions on Automatic Control*, vol. 61, no. 3, pp.748-753, 2016.
8. **M. Kishida** and R. D. Braatz, "Optimal spatial field control for controlled release," *Optimal Control Applications & Methods*, vol.36, no. 6, pp.968-984, 2015.
7. **M. Kishida** and R. D. Braatz, "Quality-by-design by skewed spherical structured singular value," *IET Control Theory & Applications*, vol.9, no. 15, pp. 2202 -2210, 2015.

6. **M. Kishida** and R. D. Braatz, "Ellipsoidal bounds on state trajectories for discrete-time systems with linear fractional uncertainties," *Optimization and Engineering*, vol. 16, pp. 695-711, 2015.
5. **M. Kishida**, P. Rumschinski, R. Findeisen and R. D. Braatz, "Efficient polynomial-time outer bounds on state trajectories for uncertain polynomial systems using skewed structured singular values," *IEEE Transactions on Automatic Control*, vol. 59, pp. 3063-3068, 2014.
4. **M. Kishida** and R. D. Braatz, "Skewed structured singular value based approach for the construction of design spaces: theory and applications," *IET Control Theory & Applications*, vol. 8, pp. 1321-1327, 2014.
3. **M. Kishida**, A. N. Ford, D. W. Pack and R. D. Braatz, "Optimal control of one-dimensional cellular uptake in tissue engineering," *Optimal Control Applications & Methods*, vol. 34, pp. 680-695, 2013.
2. L. Goh, **M. Kishida** and R. D. Braatz, "On the analysis of robust stability of metabolic pathways," *IEEE Control Systems Magazine*, vol. 32, pp. 92-94, 2012.
1. **M. Kishida** and R. D. Braatz, "Worst-case analysis of distributed parameter systems with application to the 2D reaction-diffusion equation," *Special Issue on Optimal Process Control, Optimal Control Applications & Methods*, vol. 31, no. 5, pp. 433-449, 2010.

Refereed Conference Proceedings

39. D. Weyns, B. Schmerl, **M. Kishida**, A. Leva, M. Litoiu, N. Ozay, C. Paterson and K. Tei, "Towards better adaptive systems by combining MAPE, control theory, and machine learning", *Proc. of Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)*, 2021
38. A. Cetinkaya and **M. Kishida**, "Impossibility results for stochastic constrained controls," *Proc. of SICE International Symposium on Control Systems*, 2021
37. A. Cetinkaya and **M. Kishida**, "An impossibility result concerning bounded average-moment control of linear stochastic systems," *Proc. of IFAC World Congress*, 2020 (to appear)
36. **M. Kishida**, M. Nagahara, and D. Chatterjee, "Discrete-time maximum hands-off control with minimum switches," *Proc. of IEEE Conference on Decision and Control*, 529-534, 2019
35. S. Kawamura, K. Cai, and **M. Kishida** "Robust output regulation of networked heterogeneous linear agents by distributed internal model principle," *Proc. of IEEE Conference on Decision and Control*, pp.7301-7306, 2019
34. S. Pruekprasert, X. Zhang, J. Dubut, C. Huang, and **M. Kishida**, "Decision making for autonomous vehicles at unsignalized intersection in presence of malicious vehicles," *Proc. of IEEE Intelligent Transportation Systems Conference*, Auckland, New Zealand, pp. 2299-2304, 2019.
33. C. Huang, B. Li, and **M. Kishida**, "Model predictive approach to integrated path planning and tracking for autonomous vehicles," *Proc. of IEEE Intelligent Transportation Systems Conference*, Auckland, New Zealand, pp. 1448-1453, 2019.
32. M. Ogura, **M. Kishida**, and A. Yassine, "Optimizing product development projects under asynchronous and aperiodic system-local interactions," *Proc. of International DSM Conference*, Monterey, CA, pp. 97-106, 2019.
31. M. Ogura, **M. Kishida**, K. Hayashi and J. Lam, "Geometric programming for optimizing stability of distributed power control algorithms," *Proc. of SICE Annual Conference*, Hiroshima, Japan, pp.679-680, 2019.

30. M. Ogura, **M. Kishida**, K. Hayashi and J. Lam, "Resource allocation for robust stabilization of Foschini-Miljanic algorithm," *Proc. of American Control Conference*, Philadelphia, PA, pp. 4030-4035, 2019.
29. **M. Kishida**, "Encrypted average consensus with quantized control law," *Proc. of IEEE Conference on Decision and Control*, Miami Beach, FL, pp.5850-5856, 2018.
28. R. Baba, K. Kogiso and **M. Kishida**, "Detection method of controller falsification attacks against encrypted control system," *Proc. of SICE Annual Conference*, Nara, Japan, pp. 244-248, 2018.
27. **M. Kishida**, M. Barforooshan and M. Nagahara, "Maximum hands-off control for discrete-time linear systems subject to polytopic uncertainties," *Proc. of IFAC Workshop on Distributed Estimation and Control in Networked Systems (NecSys)*, Groningen, Netherlands, IFAC-PapersOnLine, vol. 51, no. 23, pp. 355-360, 2018.
26. **M. Kishida**, "Event-triggered control for discrete-time nonlinear systems using state-dependent Riccati equation," *Proc. of European Control Conference*, Limassol, Cyprus, pp.1499-1504, 2018.
25. **M. Kishida**, "Self-triggered control for uniform ultimate boundedness using skewed structured singular values," *Proc. of IFAC World Congress*, Toulouse, France, pp.15878-15883, 2017.
24. **M. Kishida**, M. Koegel and R. Findeisen, "Event-triggered actuator signal update using self-triggered sampled data for uncertain linear systems," *Proc. of American Control Conference*, Seattle, WA, pp. 3035-3041, 2017.
23. **M. Kishida**, M. Koegel and R. Findeisen, "Verifying robust forward admissibility for nonlinear systems using (skewed) structured singular values," *Proc. of IEEE Conference on Decision and Control*, Las Vegas, NV, pp. 4065-4071, 2016.
22. **M. Kishida** and R. Findeisen, " μ -based approaches to determining guaranteed consistent and inconsistent parameter sets," *Proc. of IEEE Conference on Decision and Control*, Osaka, Japan, pp. 6603-6608, 2015.
21. **M. Kishida** and R. D. Braatz, "Volume maximization of consistent parameter sets for linear fractional models," *Proc. of IEEE Conference on Decision and Control*, Los Angeles, CA, pp. 1905-1910, 2014.
20. J. Kim, **M. Kishida** and D. G. Bates, "State bounds estimation for nonlinear systems using μ -analysis," *Proc. of IFAC World Congress*, Cape Town, South Africa, pp. 1661-1666, 2014.
19. Y. Hioka and **M. Kishida**, "Direction of arrival estimation of harmonic signal using single moving sensor," *Proc. of IEEE Sensor Array and Multichannel Signal Processing Workshop*, A Coruña, Spain, pp. 1-4, 2014.
18. **M. Kishida** and R. D. Braatz, "Non-existence conditions of local bifurcation for rational systems with structured uncertainties," *Proc. of American Control Conference*, Portland, OR, pp. 5085-5090, 2014.
17. S. Streif, K. Kim, P. Rumschinski, **M. Kishida**, D. E. Shen, R. Findeisen and R. D. Braatz, "Robustness analysis, prediction and estimation for uncertain biochemical networks," *Proc. of IFAC Symposium on Dynamics and Control of Process Systems*, Mumbai, India, pp. 1-20, 2013. [Invited plenary paper]
16. A. Mesbah, **M. Kishida** and R. D. Braatz, "Design of multi-objective failure-tolerant control systems for infinite-dimensional systems," *Proc. of IEEE Conference on Decision and Control*, Firenze, Italy, pp. 3006-3013, 2013.

15. **M. Kishida** and Y. Hioka, "Circularly moving sensor for use of modulation effect," *Proc. of International Conference on Sensing Technology*, Wellington, New Zealand, pp. 242-246, 2013.
14. **M. Kishida** and R. D. Braatz, "Quality-by-Design by using the skewed spherical structured singular value," *Proc. of American Control Conference*, Washington, DC, pp. 6673 - 6678, 2013.
13. **M. Kishida** and R. D. Braatz, "Inversion-based output regulation of chemotaxis using a constrained influx of chemical signaling molecules," *Proc. of American Control Conference*, Washington, DC, pp. 3443-3448, 2013. [Best presentation in session]
12. **M. Kishida** and R. D. Braatz, "A model-based approach for the construction of design spaces in Quality-by-Design," *Proc. of American Control Conference*, Montréal, Canada, pp.1513-1518, 2012.
11. **M. Kishida** and R. D. Braatz, "Ellipsoid bounds on state trajectories for discrete-time systems with time-invariant and time-varying linear fractional uncertainties," *Proc. of IEEE Conference on Decision and Control and European Control Conference*, Orlando, FL, pp. 5671-5676, 2011.
10. **M. Kishida**, P. Rumschinski, R. Findeisen and R. D. Braatz, "Efficient polynomial-time outer bounds on state trajectories for uncertain polynomial systems using skewed structured singular values," *Proc. of IEEE International Symposium on Computer-Aided Control System Design*, Denver, CO, pp. 216-221, 2011.
9. **M. Kishida** and R. D. Braatz, "Robust anti-windup compensation for normal systems with application to the reaction-diffusion equation," *Proc. of IFAC World Congress*, Milan, Italy, pp. 7316-7321, 2011.
8. K. Chen, **M. Kishida**, M. S. Strano and R. D. Braatz, "Parameter identifiability in parallel reaction networks with application to single-walled carbon nanotubes," *Proc. of American Control Conference*, San Francisco, CA, pp. 2873-2878, 2011.
7. **M. Kishida** and R. D. Braatz, "Structured spatial control of the reaction-diffusion equation with parametric uncertainties," *Proc. of the IEEE International Symposium on Computer-Aided Control System Design*, Yokohama, Japan, pp. 1097-1102, 2010.
6. **M. Kishida**, D. W. Pack and R. D. Braatz, "State-constrained optimal spatial field control for controlled release in tissue engineering," *Proc. of American Control Conference*, Baltimore, MD, pp. 4361-4366, 2010.
5. **M. Kishida** and R. D. Braatz, "RBF-based 2D optimal spatial control of the 3D reaction-convection-diffusion equation," *Proc. of the European Control Conference*, Budapest, Hungary, pp. 1949-1954, 2009.
4. **M. Kishida** and R. D. Braatz, "Optimal spatial field control of distributed parameter systems," *Proc. of American Control Conference*, St. Louis, MO, pp. 32-37, 2009.
3. **M. Kishida** and R. D. Braatz, "Internal model control of infinite dimensional systems," *Proc. of IEEE Conference on Decision and Control*, Cancun, Mexico, pp. 1434-1441, 2008.
2. **M. Kishida** and R. D. Braatz, "Robustness analysis of distributed parameter systems with application to the 2D reaction-diffusion equation," *Proc. of 18th International Symposium on Mathematical Theory of Networks and Systems*, Blacksburg, VA, paper SSRussell1.4, 2008.
1. **M. Kishida**, A. N. Ford, D. W. Pack and R. D. Braatz, "Optimal control of cellular uptake in tissue engineering," *Proc. of American Control Conference*, Seattle, WA, pp. 2118-2123, 2008.

Misc.

22. 小蔵正輝, 岸田昌子, 林參, 解説「大規模非負システムの幾何計画による最適設計」, 計測と制御 Vol.60 No.1, 特集「IoT時代に向けたイベントベース制御」, 2021
21. **M. Kishida**, “Event-triggered control with self-triggered sampling,” 自動制御連合講演会, 2020
20. M. Ogura, **M. Kishida**, J. Lam, “Optimization of positive linear systems via geometric programming,” Extended abstract, International Symposium on Mathematical Theory of Networks and Systems, 2020.
19. S. Pruekprasert, J. Dubut, X. Zhang, C. Huang, and **M. Kishida**, “A game theoretic approach to decision making for multiple vehicles at roundabout,” late-breaking result category, IFAC World Congress, 2020.
18. 小林恒輝, 小蔵正輝, 岸田昌子, 和田山正, 杉本謙二, “深層学習を活用したフィードバック制御系設計,” システム制御情報学会研究発表講演会, 2020. (Feedback controller synthesis by deep learning techniques)
17. 小蔵正輝, 岸田昌子, J. Lam, “幾何計画による非負システムの最適設計,” 第7回計測自動制御学会制御部門マルチシンポジウム, 2020.
16. 小林恒輝, 小蔵正輝, 岸田昌子, 和田山正, 杉本謙二, “Neural Ordinary Differential Equationを用いた静的出力フィードバック安定化の検討,” 電子情報通信学会高信頼制御通信研究会, 2020. (Neural ordinary differential equations-based static output feedback stabilization)
15. **M. Kishida**, M. Ogura, Y. Yoshida, and T. Wadayama, “Deep-learning based average consensus,” *Information-Based Induction Science Workshop*, 2019.
14. 小林恒輝, 小蔵正輝, 岸田昌子, 和田山正, 杉本謙二, “深層展開による出力フィードバック安定化の検討,” 高信頼制御通信研究会 (*RCC*), 2019. (Deep learning-based output feedback stabilization)
13. 八木聖太, 小蔵正輝, 岸田昌子, 杉本謙二, 林和則, “公平性を担保した送信電力制御アルゴリズムのロバスト安定化,” 高信頼制御通信研究会 (*RCC*), 2019. (Robust stabilization of transmit power control algorithm with fairness)
12. 八木聖太, 小蔵正輝, 岸田昌子, 杉本謙二, 林和則, “構造的な不確かさをもつ環境における分散送信電力制御アルゴリズムのロバスト安定化,” 無線通信システム研究会 (*RCS*), 2019. (Robust stabilization of distributed power control algorithms under structurally-uncertain communication environments)
11. **M. Kishida**, “Poster abstract: Encrypted control system with quantizer,” *22nd ACM International Conference on Hybrid Systems: Computation and Control*, poster, 2019.
10. 原田潤一, 小蔵正輝, 岸田昌子, 杉本謙二, “設計プロジェクトにおける追加タスクの影響を最小化するためのロバスト最適化,” 日本機械学会第28回設計工学・システム部門講演会, paper no.1101, 2018.
9. R. Baba, K. Kogiso, O. Kaneko, **M. Kishida** and K. Sawada, “Theory and applications of encrypted control systems for cyber security,” *International Workshop on Security*, poster, 2018.
8. **M. Kishida**, “Event-triggered control signal updates with self-triggered sampling for uncertain linear systems,” *SICE Annual Conference*, late breaking poster, 2016.
7. 岸田昌子, 加嶋健司, 反応移流拡散系の制御と安定性, 計測と制御, 55 (4), pp.350-355, 2016. (**M. Kishida** and K. Kashima, “Control and stability of reaction-convection-diffusion systems,” *Journal of the Society of Instrument and Control Engineers*, vol. 55, no. 4, 2016 (in Japanese))
6. 岸田昌子, 旅: ある旅の途中の研究者の話(連載講座 機械工学は21世紀を拓けるか?(第13回)), 日本機械学会誌 116 (1137), pp. 598-600, 2013. (**M. Kishida**, *Journey*, *Journal of the Japan Society of Mechanical Engineers*, vol. 116, no. 1137, pp. 598-600, 2013 (in Japanese))

5. **M. Kishida** and R. D. Braatz (speaker), “A model-based approach for the construction of design spaces in Quality-by-Design,” *AICHE Annual Meeting*, Pittsburgh, PA, Paper265879, October 2012.
4. **M. Kishida**, D. W. Pack and R. D. Braatz (speaker), “Computer-based design for stem cell tissue engineering,” *Synthetic Biology: Building on Nature’s Inspiration, 7th Annual National Academies Keck Futures Initiative (NAKFI) Conference, The National Academies*, Irvine, California, November 19-22, 2009. (poster)
3. **M. Kishida** and R. D. Braatz, “Optimal 3D spatial field control of nonlinear spatially distributed systems with state feedback,” *IFAC Workshop on Control of Distributed Parameter Systems*, Toulouse, France, July 2009.
2. **M. Kishida**, A. N. Ford, D. W. Pack and R. D. Braatz, “Optimal control of cellular uptake in tissue engineering”, *University of Illinois Student Interdisciplinary Conference*, Urbana, IL, January 2009.
1. **M. Kishida**, A. N. Ford, D. W. Pack and R. D. Braatz, “Optimal control of cellular uptake rate in tissue scaffolds”, *AICHE Annual Meeting*, Salt Lake City, UT, Paper 96d, November 2007.

Dissertation

1. **M. Kishida**, “Robust Optimal Boundary and Spatial Field Control of Distributed Parameter Systems,” *University of Illinois at Urbana-Champaign*, 2010.

Talks

16. 「10年アメリカ暮らし」SICE九州支部フォーラム2020, 海外で活躍する若者たち：コロナを乗り越える留学・就職・長期滞在のノウハウ, 2020年10月18日 (講演者兼パネリスト) [Online]
15. “Computer Bugs,” Ig Nobel Prize Ceremony, 24/7 Lecture, September 2020 [Online]
14. “Structured deep neural networks for control with a recent overview of control theory,” 3rd US-Japan HI-Tech Industrialization Forum, August 2020 [Online]
13. “Encrypted control system with quantizer,” Frontier of Secure Cyber-Physical-Human System (Workshop), University of Electro-Communications, Tokyo, July, 2019
12. “Encrypted control system”, MathWorks Asia Research Summit (invitation-only event), September 8, 2018
11. “テクノロジー・トレンドと制御”, 平成30年度 国立情報学研究所 オープンハウス産官学連携セミナー, 2018年6月22日 (NII open house seminar: Technology trend and control)
10. “動きをデザインする科学－制御屋さんのモノの見方と考え方－”, 平成29年度 国立情報学研究所 市民講座「情報学最前線」第4回, 2017年10月18日 (NII Public Lecture series, Science of motion design - mindset of control theorists)
9. “Introduction to event- and self-triggered control”, NII Hasuo Lab seminar (ERATO MMSD Project colloquium), August 4, 2017
8. “A resource-aware strategy for networked control of uncertain linear systems”, NII Luncheon seminar, November 24, 2016
7. “Analysis of uncertain systems using μ and ν ”, University of Tsukuba, Workshop on systems management and control, December 12, 2015

6. “On some optimization problems for systems with uncertainties using μ and ν ”, Lund University, August 17, 2015
5. “On some optimization problems for systems with uncertainties using μ and ν ”, Kyoto University, August 8, 2015
4. “Quality-by-Design using the concept of robust control,” Massachusetts Institute of Technology, July 24, 2013
3. “Quality-by-Design meets with control theory,” Keio University, November 29, 2012
2. “Analysis of uncertain systems using skewed structured singular values,” University of Canterbury, March 12, 2012
1. “Optimal 3D spatial field control of spatially distributed systems” (Part 1), “Internal model control of distributed parameter systems” (Part 2), University of Tokyo, October 9, 2009.

Teaching

National Institute of Informatics

- Applied Linear Algebra (coordinator) 2021
- Control Theory and Optimization 2020, 2018
- Applied Linear Algebra (co-teaching) 2020, 2019
- Scientific Presentation(co-teaching) 2019
- Scientific Writing (co-teaching) 2019
- Optimization Theory 2016

University of Canterbury

- ENEL 321: Control Systems (course coordinator, co-teaching) 2015[S1], 2014[S1], 2013[S1]
- ENEL 220: Circuits and Systems (co-teaching) 2015[S1], 2014[S2], 2013[S2]
- ENMT 301: Mechatronics System Design (co-teaching) 2014[W]
- ENEL 400: 3rd Pro Project (supervision) 2014[W], 2013[W]
- ENEL 220: Circuits and Systems (co-teaching) 2013[S2]

University of Illinois at Urbana-Champaign

- ChBE 594: Systems Engineering (Graduate Teaching Assistant) Spring 2009
- ChBE 523: Analysis of Transport Phenomena (Graduate Teaching Assistant) Spring 2008
- Calculus and Physics (Tutor at Division of Intercollegiate Athletics) 2006