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専門分野

ネットワーク科学,制御工学,最適化,確率過程,設計工学

学歴

2014年8月 テキサス工科大学 Ph.D. (Mathematics)

 2009年3月
 京都大学修士(情報学)

 2007年3月
 京都大学学士(工学)

職歴

2019年11月- 大阪大学 准教授

2017年3月-2019年10月 奈良先端科学技術大学院大学 助教

2014年11月-2017年2月 ペンシルバニア大学 電気システム工学科 博士研究員

短期滞在

2018年, 2019年 香港大学 (香港)

2013年 ルーヴァン・カトリック大学 (ベルギー)

代表的な受賞

2019年2月 IEEE Transactions on Network Science and Engineering 準最優秀論文賞

2018年3月 計測自動制御学会 制御部門 制御部門大会賞 2018年1月 計測自動制御学会 関西支部 支部長賞 奨励賞

2014年4月 テキサス工科大学 Summer Dissertation/Thesis Research Award

2013年7月 テキサス工科大学 Cash Family Endowed Fellowship

2012年6月 計測自動制御学会 論文賞

研究助成

- 国立情報学研究所 自由提案公募型共同研究 2019年度
- 国立情報学研究所 自由提案公募型共同研究 2018年度
- 科学研究費 若手研究 2018年度~2020年度 ネットワークにおける伝播の解析と制御:モチーフを活用した多項式時間アルゴリズム
- 科学研究費 基盤研究B 2018年度~2021年度 計測や通信の品質が保証されない環境下での事象トリガ調整型2自由度制御系(代表者 杉本謙二)

研究業績

著書

[1] 永原正章, 岡野訓尚, 小蔵正輝, and 若生将史, ネットワーク化制御. コロナ社, 2019.

著書(book chapter)

- [1] M. Ogura and V. M. Preciado, "Optimal Containment of Epidemics in Temporal and Adaptive Networks," in *Temporal Networks Epidemiology*. Springer, 2017, pp. 241–266.
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招待講演等

- [1] "幾何計画法による送信電力制御," 2019年度次世代ワイヤレス技術講座(発表予定), 2020.
- [2] "ネットワーク化制御-サイバーフィジカルシステムを理解し,制御するために-," *2020*年1月高信頼制御通信研究会(発表予定),2020.
- [3] "Synthesis of positive linear systems by geometric programming," University of Hong Kong, 2019.
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- [7] "Networked epidemic spreading: modeling, analysis, and control," *National Institutite of Informatics*, 2018
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- [9] "重要人物はだれ?~つながりを科学する,"生駒市立中学校出前授業,2018.
- [10] "Network epidemiology and control theory," University of Hong Kong, 2018.
- [11] "テンポラルネットワークの数理モデリング,"第62回システム制御情報学会研究発表講演会, 2018.
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- [17] "Dynamical systems over time-varying networks," Tokyo Institute of Technology, 2015.

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解說 · 総説

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査読付き論文

- [1] 蓼沼知秀, 小蔵正輝, and 杉本謙二, "観測信号と操作信号の損失にロバストなラウンドロビンスケジューリング切り替え制御系," 計測自動制御学会論文集, vol. 56, no. 3, 2020.
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- [2] M. Aida, C. Takano, and M. Ogura, "On the fundamental equation of user dynamics and the structure of online social networks," in *NetSci-X 2020* (accepted), 2020.
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- [9] W. Mei and M. Ogura, "Instability analysis of Markov jump linear systems by spectral optimization," in *SICE Annual Conference 2018*, 2018, pp. 419–422.

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学会発表

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教育経験

奈良先端科学技術大学院大学

- 情報科学特別講義 (2018)
- 知能システム制御特論 (2017, 2018)

ペンシルバニア大学

• Convex Optimization in Systems and Control (Co-lecturer, Fall 2015)

テキサス工科大学

- 講師
 - Calculus II (Summer 2014, Spring 2014, Spring 2013)
 - Calculus I (Summer 2013, Fall 2012)
 - Trigonometry (Fall 2011)
 - College Algebra (Fall 2013, Spring 2012)
- ティーチングアシスタント
 - Advanced Calculus (Summer 2012)
 - Linear Algebra (Summer 2012)
 - Higher Mathematics for Engineers and Scientists I (Summer 2011)

京都コンピュータ学院

- 制御工学 (2009, 2009)
- 電気回路 (2008)
- データ構造 (2008)
- 数值解析 (2009, 2010)

京都大学 (ティーチング・アシスタント)

- 自然現象と数学 (2009)
- 現代制御論 (2008, 2009)

学会活動

- 2019年度~:計測自動制御学会 関西支部 庶務幹事
- 2019年~:計測自動制御学会 制御部門 真なるダイナミクスの追求による次世代システム制御理 論調査研究委員会,委員
- 2018年度~:電子情報通信学会 高信頼制御通信研究会(RCC), 幹事補佐
- 2018年~:計測自動制御学会 制御部門 IoT時代に向けたイベントベースト制御調査研究会,委員
- 2018年: Local Arrangements Vice Chair, SICE Annual Conference 2018
- 2017年 \sim : International Federation of Automatic Control, Technical Committee 1.5. Networked Systems, Member
- 2015年: 5th IFAC Workshop on Distributed Estimation and Control in Networked Systems, Associate Editor