Wei Lin

Curriculum Vitae updated January 2018

Contact Information

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Research Interests

Machine Learning, Game Theory, Multi-Agent Systems, Optimization, Energy Systems

Education

University of Central Florida, Orlando, FL

Ph.D. in Electrical Engineering (12/2013)
Dissertation: "Differential Games for Multi-agent Systems under Distributed Information"

Boston University, Boston, MA
M.S. in Electrical Engineering (5/2009)

Tongji University, Shanghai, China
B.Eng. in Automation (6/2007)

Professional Experience

Inspire Energy, Santa Monica, CA

Senior Data Scientist (3/2017 to present)
Develop machine learning algorithms for customer load forecasting and churn prediction.
Data Scientist (11/2015 to 3/2017)
Architected business operating model for financial forecasting and portfolio management.

Western Digital Corporation, Irvine, CA

Staff Firmware Engineer (1/2014 to 11/2015)
Prototyped machine learning algorithms for hard drive failure prediction and developed sensor fusion and adaptive filtering algorithms for hard drive vibration control.

University of Central Florida, Orlando, FL

Research Assistant (1/2010 to 12/2013)
Conducted research on multi-agent dynamic systems under distributed information with applications to unmanned aerial vehicles, distributed generation system optimization.

Alcatel-Lucent Shanghai Bell, Shanghai, China

Electronics Designer (7/2009 to 11/2009)
Designed embedded rail signal control system hardware with high safety standard.

Teaching Experience

University of Central Florida, Orlando, FL

Teaching Assistant
EEL 4140 Analog Filter Design (Fall 2011).
Instructed lab sessions and administered all grades
EEL 4750 Digital Signal Processing Fundamentals (Fall 2010)
Instructed lab sessions and administered all grades

Publications

1. W. Lin, "Distributed UAV formation control using differential game approach," *Aerospace Science and Technology*, vol. 35, pp. 54-62, 2014.

2. A. Maknouninejad, W. Lin, H. Harno, Z. Qu, and M. Simaan, "Cooperative control for self-organizing microgrids and game strategies for optimal dispatch of distributed renewable generations," *Energy Systems*, vol. 3, no. 1, pp. 23-60, 2012.

3. W. Lin, "Differential games for multi-agent systems under distributed information", *Ph.D. dissertation*, University of Central Florida, 2013

4. W. Lin, Z. Qu, and M. Simaan, "Nash strategies for pursuit-evasion differential games involving limited observations," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 51, no. 2, pp. 1347-1356, 2015

5. W. Lin, Z. Qu, and M. Simaan, "Distributed game strategy design with application to multi-agent formation," *53rd IEEE Conference on Decision and Control*, Los Angeles, CA, pp. 433-438, 2014.

6. W. Lin, Z. Qu, and M. Simaan, "Multi-pursuer single-evader differential games with limited observations," *American Control Conference*, Washington D.C., USA, pp. 2711-2716, 2013

7. A. Maknouninejad, W. Lin, and Z. Qu "Optimum design and analysis of the cooperative control applied to the distributed generators control in smart grids," *IEEE PES Innovative Smart Grid Technologies (ISGT)*, pp. 1-6, 2013.

8. W. Lin, Z. Qu, and M. Simaan, "A design of entrapment strategies for the distributed pursuit-evasion game," *18th IFAC World Congress*, Milan, Italy, 2011, pp. 9334–9339.

9. W. Lin, Z. Qu, and M. Simaan, "A Design of Distributed Nonzero-Sum Nash Strategies," *49th IEEE Conferenceon Decision and Control*, Atlanta, GA, 2010, pp. 6305–6310.

Professional Membership

IEEE Control System Society

Professional Activity

Peer Reviewer:

- IEEE Transcation on Automatic Control
- Aerospcae Science and Technology
- Automatica
- IEEE Access
- Optimal Control, Applications and Methods
- Journal of Control and Decision
- International Journal of Control, Automation and Systems
- Journal of Guidance, Control, and Dynamics
- Robotics and Autonomous Systems
- Journal of Supercomputing
- American Control Conference
- IEEE Conference on Decision and Control
- ASME Conference on Information Storage and Processing Systems

Volunteer:

- 50th IEEE Conference on Decision and Control, IEEE, Orlando, FL, 2012

Presentations

"Distributed game strategy design with application to multi-agent formation," in *53rd IEEE Conference on Decision and Control*, Los Angeles, CA, USA, 2014.

"Multi-pursuer single-evader differential games with limited observations," in *American Control Conference*, Washington D.C., USA, 2013.

"A Design of Distributed Game Strategies for Autonomous Vehicles," in *1st National Control Engineering Student Workshop*, University of Maryland, MD, 2011.

"A Design of Distributed Nonzero-Sum Nash Strategies," in *49th IEEE Conferenceon Decision and Control*, Atlanta, GA, USA, 2010.

Awards and Certificates

Third-Class Scholarship, Tongji University, 2006.
Third-Class Scholarship, Tongji University, 2004.
Li Zutong Scholarship, Xiaoshi Middle School, 2003.

References

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