

# Yuanzhang Xiao

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## CONTACT INFORMATION

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University of Hawaii at Manoa,  
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## RESEARCH INTERESTS

### Theory

Optimization, reinforcement learning, game theory

### Applications

Socio-technological networks (e.g., sharing economy, crowdsourcing),  
Smart grids (e.g., electricity markets, renewable energy, electric vehicles),  
Wireless communications (e.g., 5G, Internet of things).

## ACADEMIC EMPLOYMENT

**University of Hawaii at Manoa, USA**

**Aug. 2017 – present**

Assistant Professor

**Northwestern University, USA**

**May 2015 – Jul. 2017**

Postdoctoral Fellow

- Advisor: Prof. Ermin Wei

**University of California, Los Angeles, USA**

**Jul. 2014 – Apr. 2015**

Postdoctoral Fellow

- Advisor: Prof. Mihaela van der Schaar

## EDUCATION

**University of California, Los Angeles, USA**

**Sep. 2009 – Jun. 2014**

Ph.D. in Electrical Engineering

- Dissertation: Optimal sequential resource sharing and exchange in multi-agent systems
- Advisor: Prof. Mihaela van der Schaar

**Tsinghua University, Beijing, China**

**Sep. 2006 – Jun. 2009**

M.E. in Electronic Engineering

- Thesis title: Limited-feedback precoding for giga-bit wireless transmission systems
- Advisor: Prof. Shidong Zhou

**Tsinghua University, Beijing, China**

**Sep. 2002 - Jun. 2006**

B.E. in Electronic Engineering

## HONORS AND AWARDS

Top 50 papers out of 2000+ submissions in IEEE Globecom Conference,

2014

Dissertation Year Fellowship, UCLA,

2013–2014

Qualcomm Innovation Fellowship Finalist,

2012, 2013

University Fellowship, UCLA,

2009

Scholarship for Academic Excellence, Tsinghua University,

2003–2005

Scholarship for Freshmen, Tsinghua University,

2002

First prize, China Mathematics Olympiad in provinces,

2001

REPRESENTATIVE  
WORKS

The full list of publications can be found [online](#). Below are my most recent representative works.

1. **Yuanzhang Xiao**, Chaithanya Bandi, and Ermin Wei , “Efficiency of Supply Function Equilibrium in Electricity Markets,” *submitted*. Available [here](#). Conference versions in [Asilomar 2015](#) and [GlobalSIP 2016](#).
2. **Yuanzhang Xiao**, Chaithanya Bandi, and Ermin Wei , “Robust Supply Function Bidding in Electricity Markets With Renewables,” in *Proc. Allerton Conf. on Communication, Control, and Computing*, 2016.
3. Chang Liu, **Yuanzhang Xiao**, Ermin Wei and Randall Berry, “Competition and Investment in On-Demand Networking Technology,” in *Proc. IEEE/IFIP Wireless On-Demand Network Systems and Services Conference (WONS)*, 2017. Available [here](#).
4. (*authors listed alphabetically in this paper*) Mihaela van der Schaar, **Yuanzhang Xiao**, and William Zame, “Endogenous Matching in a Dynamic Assignment Model with Adverse Selection and Moral Hazard,” *Submitted*. Available: <http://yuanzhangxiao.com/papers/VDS-XYZ-WZ-Submitted2016.pdf>.
5. **Yuanzhang Xiao**, Florian Dörfler, and Mihaela van der Schaar, “Incentive Design in Peer Review: Rating and Repeated Endogenous Matching,” *IEEE Transactions on Network Science and Engineering*, forthcoming. Available: <http://arxiv.org/abs/1411.2139>
6. (*authors are listed alphabetically in this paper*) Mihaela van der Schaar, **Yuanzhang Xiao**, and William Zame, “Efficient Outcomes in Repeated Games with Limited Monitoring,” *Economic Theory*, vol. 60, no. 1, pp. 1-34, Sep. 2015. [Featured as the lead article](#).
7. **Yuanzhang Xiao** and Mihaela van der Schaar, “Socially-Optimal Design of Service Exchange Platforms with Imperfect Monitoring,” *ACM Transactions on Economics and Computation*, vol. 3, no. 4, Jul. 2015.

TEACHING  
EXPERIENCE

Instructor for EE617 Convex Optimization, University of Hawaii,	Fall 2017
Guest Lecturer for EECS 422 Random Processes, Northwestern University	Winter 2016
Guest Lecturer for EE218 Network Economics and Game Theory, UCLA	Winter 2015
Teaching Assistant for EE113 Digital Signal Processing, UCLA	Spring 2011, Spring 2012
Teaching Assistant for EE238 Multimedia Communications and Processing, UCLA	Fall 2011
Teaching Assistant for EE218 Network Economics and Game Theory, UCLA	Winter 2011

PROFESSIONAL  
EXPERIENCE

Technical reviewer for IEEE Journal on Selected Areas in Communications, IEEE Transactions on Power Systems, IEEE Transactions on Mobile Computing, IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, IEEE Transactions on Circuits and Systems I, IEEE ICC, IEEE VTC, IEEE WCNC, GameNets, IEEE Globecom, IEEE GlobalSIP.  
Volunteer for IEEE ICC 2008.