



Professional Activities and Service

1 Within Princeton University

- Initiator and organizer of the first **Princeton Day of Optimization** (September 28, 2018)
 - Website: https://orfe.princeton.edu/pdo/
 - 350 participants from about 50 academic and industrial institutions
 - Theme of the inaugural edition: the interplay between optimization, control, and machine learning
 - Related news article by Princeton University's Office of Communications can be found via this link
- $\circ\,$ Initiator and organizer of the Princeton Optimization Seminar
 - 56 seminars held during Fall 2014-Fall 2018
 - Past talks: https://orfe.princeton.edu/events/optimization-seminar/past
- Completely redesigned the undergraduate course COS 323 (now offered under ORF 363/COS 323)
 - Course website: http://aaa.princeton.edu/orf363
 - Yearly enrollment: 80+ students from about 12 departments (current enrollment: 110)
- On the Curriculum Committee for the Undergraduate Program of the Center for Statistics and Machine Learning (headed by Prof. Peter Ramadge), Fall 2017- Present
- On the Curriculum Committee for the Graduate Program of the Center for Statistics and Machine Learning (headed by Prof. Peter Ramadge), Fall 2017- Present
- On the Committee for SEAS-wide Senior Faculty Search in Robotics and Cyber-Physical Systems (headed by Prof. Naomi Leonard), Fall 2017 & Spring 2018
- On the Executive Committee of the Robotics and Intelligent Systems Certificate Program, Fall 2018-present
- Academic-Athletic Fellow of the Princeton Men's Tennis Team, 2015-present
- Freshman Advisor and Faculty Advisor for Whitman College, 2017-2018
- $\circ\,$ Freshman Advisor and Faculty Advisor for Whitman College, 2016-2017
- Freshman Advisor and Faculty Advisor for Whitman College, 2015-2016
- Participating Faculty Member of the Center for Statistics and Machine Learning, 2016-Present
- On the evaluation committee of the School of Engineering and Applied Sciences' Innovation Funds (category: Data Science) and the "small-c centers initiative", 2018

- Instructor of a tutorial lecture on MATLAB to 150+ SEAS students, Fall 2016 & Fall 2017
- $\circ~$ On the PhD Final Public Oral Examination Committee of
 - Katie Fitch, Mechanical Engineering (advised by Prof. Naomi Leonard), 10/16
 - Chu Wang, PACM (advised by Prof. Bernard Chazelle), 6/16
 - Yutong Chen, PACM (advised by Prof. Amit Singer), 3/18
 - Jose Simoes Bravo Ferreira, PACM (advised by Prof. Amit Singer), 10/18
- $\circ~$ On the General Examination Committee of
 - Desmond Zhong, Mechanical Engineering (advised by Prof. Naomi Leonard), 1/17
 - Jose Simoes Bravo Ferreira, PACM (advised by Prof. Amit Singer), 8/15
 - Yuan Liu, PACM (advised by Prof. Amit Singer), 10/15

2 Within ORFE

- Organizer of the ORFE Colloquium, Fall 2016 & Spring 2017
- $\circ\,$ Developed a new undergraduate course (ORF 363) and completely redesigned a core graduate course (ORF 523)
- Advisor of 18 undergraduate students for senior theses and 2 undergraduate students for junior theses; see CV for theses titles
- On the search committee for a junior faculty hire in Data Science, Fall 2018 & Spring 2019
- $\circ\,$ Academic advisor of ${\sim}15$ undergraduate students per year
- $\circ~$ On the PhD Final Public Oral Examination Committee of
 - Changle Lin (advised by Prof. John Mulvey), 9/16
 - Firdevs Ulus (advised by Prof. Birgit Rudloff), 8/15
 - Maximilian Goer (advised by Prof. John Mulvey), 8/15
 - Georgina Hall, 5/18
 - Jing Ye (advised by Prof. John Mulvey), 9/18
- On the General/Qualification Examination Committee of
 - Jeffrey Zhang, 5/16
 - Thomas Pumir, 5/16
 - Jing Ye (advised by Prof. John Mulvey), 5/15
 - Kaizheng Wang (advised by Prof. Jianqing Fan), 5/17
 - Bachir El Khadir, 5/17
 - Sinem Uysal (advised by Prof. John Mulvey), 8/17 and 5/18
 - Zach Hervieux, 8/17
 - Cemil Dibek, 5/18
 - Joane Joseph (advised by Prof. Robert Vanderbei), 5/18

3 Within the research community at large

- \circ Associate Editor of Mathematics of Operations Research (term begins 1/1/2019)
- $\circ~$ On the Selection Committee of the 2018 Best Student Paper Prize of the INFORMS Optimization Society
- Co-organizer of a workshop on "Solving large-scale semidefinite programs in control, machine learning, and robotics" at the 2016 IEEE Conference on Decision and Control (11 coordinated lectures)
 - Website: http://aaa.princeton.edu/largesdps
- $\circ~$ Tutorial lectures on algebraic methods in optimization Speaker:
 - 2016 International Conference on Robotics and Automation
 - 2014 IEEE Conference on Decision and Control
 - 2013 IEEE Conference on Decision and Control

Co-organizer and speaker:

- 2017 IEEE Conference on Decision and Control (on "Improving efficiency of SOS optimization: recent advances and limitations")
- 2016 INFORMS Optimization Society Conference (on "Sum of squares hierarchies for polynomial optimization")
- Website: http://aaa.princeton.edu/tutorials
- Speaker and panelist at a workshop titled "Getting your Research Funded" held by the Junior Faculty Interest Group at the 2018 INFORMS Annual Meeting
- $\circ\,$ Speaker and panelist at a workshop titled "Getting an NSF CAREER Award" held for junior faculty at the 2018 American Control Conference
- On the organizing committee of the:
 - INFORMS Optimization Society Conference, '16
 - INFORMS International Conference, Cluster on Optimization, '16
- $\circ~$ On the technical committee of the:
 - IEEE Conference on Decision and Control, '17
 - Control Systems Society: Computational Aspects of Control System Design, '16
 - 5th IFAC Workshop on Estimation and Control in Networked Systems, '15
 - DIMACS Workshop on the Geometry of Distances, '16
 - IEEE Symp. on Signal and Information Processing in Finance and Economics, '13
- $\circ~$ Co-organizer (with Ramon van Handel) of the Julia Robinson Math Festival, Princeton University, Spring 2017
 - Program aimed at inspiring primary and middle-school students to pursue mathematics
- $\circ~$ Mathematics mentor at the Julia Robinson Math Festival, Princeton University, '15, '16

- \circ Organizer of >15 technical sessions at major optimization meetings including ISMP, SIOPT, ICCOPT, INFORMS, MOPTA
- Reviewer for Mathematical Programming, SIAM Journal on Optimization, Mathematics of Operations Research, Annals of Mathematics, Journal of the American Mathematical Society, SIAM Journal on Control and Optimization, IEEE Transactions on Automatic Control, Cambridge University Press, and the National Science Foundation of the US and Czech Republic