

CV - Salar Fattahi

GENERAL **Address:** 2753 IOE, 205 Beal Ave, Ann Arbor, MI, 48109
Email: fattahi@umich.edu
Website: <http://fattahi.engin.umich.edu/>

ACADEMIC **Assistant Professor** August 2020 - present
EXPERIENCE University of Michigan, Ann Arbor, MI, USA,
Department of Industrial and Operations Engineering,
Other Affiliations:
Michigan Institute for Data Science,
Michigan Institute for Computational Discovery and Engineering,
Michigan Center for Applied and Interdisciplinary Mathematics,
Controls Group

Visiting Assistant Professor June 2020 - August 2020
University of Michigan, Ann Arbor, MI, USA,
Department of Industrial and Operations Engineering

EDUCATION **Ph.D., University of California, Berkeley**, Berkeley, CA, USA May 2016 – July 2020
Industrial Engineering and Operations Research
Minor in Statistics
Advisors: Prof. Javad Lavaei and Prof. Somayeh Sojoudi

M.Sc., University of California, Berkeley, Berkeley, CA, USA August 2015 – May 2016
Industrial Engineering and Operations Research

M.Sc., Columbia University, New York City, NY, USA September 2014 – August 2015
Electrical Engineering

B.Sc, Sharif University of Technology, Tehran, Iran August 2009 – July 2014
Electrical Engineering
Minor in Computer Science

HONORS 1. **INFORMS Computing Society Best Student Paper – Runner Up Prize** 2022
For the paper “A Graph-based Decomposition Method for Convex Quadratic Optimization with Indicators”

2. **NeurIPS Outstanding Reviewer Award** 2021
given to the top 8% of reviewers who were judged to be instrumental to the review process based on Area Chair and author feedback

3. **INFORMS Energy, Natural Resources, and the Environment Best Student Paper Award** 2020
For the paper “Smoothing Property of Load Variation Promotes Finding Global Solutions of Time-Varying Optimal Power Flow”

4. **Outstanding Student Paper Award of the IEEE Conference on Control Technology and Applications** 2020
For the paper “Absence of Spurious Local Trajectories in Time-Varying Optimization: A Control-Theoretic Perspective”

5. **Best-of-the-Best Paper Award of the 2020 Power Energy Society General Meeting** 2020
For the paper "Load Variation Enables Escaping Poor Solutions of Time-Varying Optimal Power Flow"
6. **IEOR Faculty Fellowship Award** 2019
The highest graduate student award (single award) in the IEOR Department, UC Berkeley
7. **INFORMS Data Mining Best Paper Award** 2018
For the paper "Graphical Lasso and Thresholding: Equivalence and Closed-Form Solutions"
8. **Finalist for American Control Conference Best Student Paper Award** 2018
For the paper "Closed-Form Solution and Sparsity Path for Inverse Covariance Estimation Problem", (5 finalists out of 1623 submitted papers)
9. **Winner of Katta G. Murty Best Paper Award** 2018
For the paper "Graphical Lasso and Thresholding: Equivalence and Closed-Form Solutions", IEOR Department, UC Berkeley
10. **Travel Grant** 2018
Conference on Decision and Control
11. **Travel Grant** 2018
American Control Conference
12. **Outstanding Graduate Student Instructor Award** 2017
In recognition of my achievements as a teaching assistant, UC Berkeley
13. **Marshall-Oliver-Rosenberger Fellowship Award** 2017
Given annually to at most 2 PhD students with demonstrated research in decision science, IEOR Department, UC Berkeley
14. **Best Reviewer Award** 2016
IEEE Transactions on Smart Grid
15. **Armstrong Fellowship Award** 2014
Columbia University
- Travel Grant** 2018
American Control Conference

GRANTS

1. *Scalable Inference of Spatio-temporal Markov Random Fields*
Sponsor: National Science Foundation - Division of Mathematical Sciences
PIs: **Salar Fattahi (PI)**, Andres Gomez (co-PI), Arvind Rao (co-PI)
Total award amount: \$399,998
Duration: 8/2022-7/2025
2. *Global Guarantees for Robust Matrix Factorization: Promises of Nonconvex Formulations*
Sponsor: Office of Naval Research - Computational Methods for Decision Making Program
PIs: **Salar Fattahi (sole PI)**
Total award amount: \$430,556
Duration: 3/2022-2/2025

3. *Collaborative Partnership with Low-income Detroit Schools to Promote Interest in STEM*
 Sponsor: DEI Faculty Grant, University of Michigan
 PIs: **Salar Fattahi (PI)**, Tiffany Wu (co-PI)
 Total award amount: \$10,000
 Duration: 8/2022-8/2023

 4. *Scalable Inference of Spatially-Varying Graphical Models with Applications in Genomics*
 Sponsor: Catalyst Grant, Michigan Institute for Computational Discovery and Engineering (MICDE)
 PIs: **Salar Fattahi (PI)**, Arvind Rao (co-PI)
 Total award amount: \$100,000
 Duration: 8/2021-8/2023

 5. *Next Generation Data Science: From High Dimensional Statistics to Nonconvex Optimization*
 Sponsor: Seeding To Accelerate Research Themes, University of Michigan
 PIs: Qing Qu (PI), Laura Balzano (co-PI), Albert Berahas (co-PI), Eunshin Byon (co-PI), **Salar Fattahi (co-PI)**
 Total award amount: \$75,000
 Duration: 5/2022-5/2023

 6. *IPODS: Innovative and Powerful Optimization Methods for Data Science with Statistical Guarantees*
 Sponsor: Propelling Original Data Science, Michigan Institute for Data Science (MIDAS)
 PIs: Albert Berahas (PI), **Salar Fattahi (PI)**
 Total award amount: \$10,000
 Duration: 6/2021-12/2022
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PUBLICATIONS

* indicates that the student is advised by me.

Preprints:

1. J. Ma*, S. Fattahi, “On the Optimization Landscape of Burer-Monteiro Factorization: When do Global Solutions Correspond to Ground Truth?”, submitted, 2023.
2. G. Liang*, G. Zhang, S. Fattahi, R. Y. Zhang, “Alternating Minimization Provably Solves Complete Dictionary Learning” , submitted, 2022. [\[Link\]](#)
3. V. Ravikumary, T. Xu*, S. Fattahi, A. Rao “Efficient Inference of Spatially-varying Gaussian Markov Random Fields with Applications in Gene Regulatory Networks”, submitted to **IEEE/ACM Transactions on Computational Biology and Bioinformatics**, *minor revision*, 2023. [\[Link\]](#)
4. G. Zhang, S. Fattahi, R. Y. Zhang “Preconditioned Gradient Descent for Overparameterized Nonconvex Burer–Monteiro Factorization with Global Optimality Certification” , submitted to **Journal of Machine Learning Research**, *conditionally accepted with minor revision*, 2023. [\[Link\]](#)

2023:

5. J. Ma*, S. Fattahi, “Global Convergence of Sub-gradient Method for Robust Matrix Recovery: Small Initialization, Noisy Measurements, and Over-parameterization” , **Journal of Machine Learning Research**, 2023. [\[Link\]](#)
6. J. Ma*, L. Guo*, S. Fattahi, “Behind the Scenes of Gradient Descent: A Trajectory Analysis via Basis Function Decomposition”, **International Conference on Representation Learning**, 2023. [\[Link\]](#)

2022:

7. J. Ma^{*}, S. Fattahi, “Blessing of Nonconvexity in Deep Linear Models: Depth Flattens the Optimization Landscape Around the True Solution”, **Neural Information Processing Systems**, 2022. [\[Link\]](#)
- **Spotlight paper (top 3%)**
8. P. Liu, S. Fattahi, A. Gómez, S. Küçükyavuz, “A Graph-based Decomposition Method for Convex Quadratic Optimization with Indicators”, **Mathematical Programming**, 2022. [\[Link\]](#)
- **INFORMS Computing Society Best Student Paper – Runner Up Prize, 2022**

2021:

9. G. Zhang, S. Fattahi, R. Y. Zhang, “Preconditioned Gradient Descent for Over-parameterized Matrix Factorization”, **Neural Information Processing Systems**, 2021. [\[Link\]](#)
10. S. Fattahi, A. Gómez, “Scalable Inference of Sparsely-changing Markov Random Fields with Strong Statistical Guarantees”, **Neural Information Processing Systems**, 2021. [\[Link\]](#)
11. J. Ma^{*}, S. Fattahi, “Sign-RIP: A Robust Restricted Isometry Property for Low-rank Matrix Recovery”, **Neural Information Processing Systems**, Workshop on Optimization for Machine Learning, 2021. [\[Link\]](#)
12. S. Fattahi, C. Jozs, R. Mohammadi, J. Lavaei, S. Sojoudi, “Absence of Spurious Local Trajectories in Time-varying Optimization”, **IEEE Transactions on Automatic Control**, 2021. [\[Link\]](#)
13. S. Fattahi, “Learning Partially Observed Linear Dynamical Systems from Logarithmic Number of Samples”, **Learning for Dynamics & Control Conference**, 2021. [\[Link\]](#)
14. J. Mulvaney-Kemp, S. Fattahi, J. Lavaei, “Smoothing Property of Load Variation Promotes Finding Global Solutions of Time-Varying Optimal Power Flow”, **IEEE Transactions on Control of Network Systems**, 2021. [\[Link\]](#)
- **INFORMS ENRE Best Student Paper Award, 2020**
15. S. Fattahi, S. Sojoudi, “Sample Complexity of Sparse System Identification Problem for Linear Time-Invariant Systems”, **IEEE Transactions on Control of Network Systems**, 2021. [\[Link\]](#)

2020:

16. S. Fattahi, S. Sojoudi, “Exact Guarantees on the Absence of Spurious Local Minima for Rank-1 Non-negative Robust Principal Component Analysis”, **Journal of Machine Learning Research**, 2020. [\[Link\]](#)
17. S. Fattahi, N. Matni, S. Sojoudi, “Efficient Learning of Distributed Linear-Quadratic Regulators”, **SIAM Journal on Control and Optimization**, 2020. [\[Link\]](#)
18. S. Fattahi, C. Jozs, R. Mohammadi, J. Lavaei, S. Sojoudi, “Absence of Spurious Local Trajectories in Time-Varying Optimization: A Control-Theoretic Perspective”, **IEEE Conference on Control Technology and Applications**, 2020.
19. J. Mulvaney-Kemp, S. Fattahi, J. Lavaei, “Load Variation Enables Escaping Poor Solutions of Time-Varying Optimal Power Flow”, **IEEE Power & Energy Society General Meeting**, 2020. [\[Link\]](#)
- **Best-of-the-Best Conference Paper Award**

2019:

20. S. Fattahi, S. Sojoudi, “Graphical Lasso and Thresholding: Equivalence and Closed-Form Solutions”, **Journal of Machine Learning Research**, 2019. [\[Link\]](#)
 - **INFORMS Data Mining Best Paper Award, 2018**
 - **Katta G. Murty Best Paper Award, 2018.**
21. S. Sojoudi, S. Fattahi, J. Lavaei, “Convexification of Generalized Network Flow Problem”, **Mathematical Programming**, 2019. [\[Link\]](#)
22. S. Fattahi, J. Lavaei, A. Atamtürk, “A Bound Strengthening Method for Optimal Transmission Switching in Power Systems with Fixed Connected Subgraph”, **IEEE Transactions on Power Systems**, 2019. [\[Link\]](#)
23. S. Fattahi, G. Fazelnia, J. Lavaei, M. Arcak, “Transformation of Optimal Centralized Controllers Into Near-Global Static Distributed Controllers”, **IEEE Transactions on Automatic Control**, 2019. [\[Link\]](#)
24. S. Fattahi, R. Y. Zhang, S. Sojoudi, “Linear-Time Algorithm for Learning Large-Scale Sparse Graphical Models”, **IEEE Access**, 2019. [\[Link\]](#)
25. S. Fattahi, N. Matni, S. Sojoudi, “Learning Sparse Dynamical Systems from a Single Sample Trajectory”, **IEEE Conference on Decision and Control**, 2019. [\[Link\]](#)

2018:

26. R. Y. Zhang, S. Fattahi, S. Sojoudi, “Large-Scale Sparse Inverse Covariance Estimation via Thresholding and Max-Det Matrix Completion”, **International Conference on Machine Learning**, 2018. [\[Link\]](#)
27. S. Fattahi, S. Sojoudi, “Data-Driven Sparse System Identification”, **Annual Allerton Conference on Communication, Control, and Computing**, 2018. [\[Link\]](#)
28. S. Fattahi, S. Sojoudi, “Non-Asymptotic Analysis of Block-Regularized Regression Problem”, **IEEE Conference on Decision and Control**, 2018. [\[Link\]](#)
29. S. Fattahi, S. Sojoudi “Closed-Form Solution and Sparsity Path for Inverse Covariance Estimation Problem”, **American Control Conference** , 2018. [\[Link\]](#)
 - **Best Student Paper Award - Finalist**
30. G. Darivianakis, S. Fattahi, J. Lavaei, J. Lygeros, “High-Performance Cooperative Distributed Model Predictive Control for Linear Systems”, **American Control Conference**, 2018. [\[Link\]](#)
31. S. Fattahi, R.Y. Zhang, S. Sojoudi, “Sparse Inverse Covariance Estimation for Chordal Structures”, **European Control Conference**, 2018.

2017:

32. S. Fattahi, M. Ashraphijou, J. Lavaei, A. Atamtürk, “Conic Relaxation of the Unit Commitment Problem”, **Energy**, 2017. [\[Link\]](#)
33. S. Fattahi, J. Lavaei, A. Atamtürk “Promises of Conic Relaxations in Optimal Transmission Switching of Power Systems”, **IEEE Conference on Decision and Control**, 2017. [\[Link\]](#)

- 34. S. Fattahi, J. Lavaei, M. Arcak “A Scalable Method for Designing Distributed Controllers for Systems with Unknown Initial State”, **IEEE Conference on Decision and Control**, 2017. [\[Link\]](#)
- 35. S. Fattahi, J. Lavaei, “On the Convexity of Optimal Decentralized Control Problem and Sparsity Path”, **American Control Conference**, 2017. [\[Link\]](#)

2016:

- 36. S. Fattahi, J. Lavaei, “Theoretical Guarantees for the Design of Near Globally Optimal Static”, **Annual Allerton Conference on Communication, Control, and Computing**, 2016. [\[Link\]](#)
- 37. M. Ashraphijou, S. Fattahi, J. Lavaei, A. Atamtürk, “A Strong Semidefinite Programming Relaxation of the Unit Commitment Problem”, **IEEE Conference on Decision and Control**, 2016. [\[Link\]](#)

2015:

- 38. S. Fattahi, J. Lavaei, “Convex Analysis of Generalized Flow Networks”, **IEEE Conference on Decision and Control (CDC)**, pp. 1569-1576, 2015. [\[Link\]](#)
- 39. S. Fattahi, G. Fazelnia, J. Lavaei, “Transformation of Optimal Centralized Controllers Into Near-Global Static Distributed Controllers”, **IEEE Conference on Decision and Control**, 2015. [\[Link\]](#)

2014:

- 40. S. Fattahi, M. Azghani, F. Marvasti, “An Algorithm for Detecting Exact Regions of Moving Objects in Video Frames”, **IEEE International Symposium on Telecommunications**, 2014. [\[Link\]](#)

Dissertation:

- S. Fattahi, “Structure-Aware Methods in Large-Scale Computational Problems: Machine Learning, Optimization, and Control”, University of California, Berkeley, USA, 2020. [\[Link\]](#)

INVITED TALKS

1. **SIAM Conference on Optimization** , Seattle, WA, June 2023
“Blessing of Nonconvexity in Deep Linear Models: Depth Flattens the Optimization Landscape Around the True Solution”
2. **SIAM Conference on Computational Science and Engineering** , Amsterdam, Netherlands, February 2023
“Blessing of Nonconvexity in Factorized Models”
3. **Michigan Medicine**, Tools and Technology Seminar, Department of Computational Medicine and Bioinformatics, Ann Arbor, MI, January 2023
“Scalable Learning of Dynamic Graphical Models with Combinatorial Structures: Beyond Maximum Likelihood Estimation”
4. **INFORMS Annual Meeting** , Indianapolis, IN, October 2022
“Global Convergence of Sub-gradient Method for Low-rank Matrix Factorization”
5. **University of Michigan** , ECE Communications and Signal Processing Seminar Series, Ann Arbor, MI, September 2022
“Global Convergence of Sub-gradient Method on Factorized Models”
6. **International Conference on Continuous Optimization**, Bethlehem, PA, July 2022
“Global Convergence of Sub-Gradient Method for Robust Matrix Recovery: Small Initialization, Noisy Measurements, and Over-Parameterization”

7. **Johns Hopkins University**, Mathematical Institute for Data Science, Baltimore, PA, April 2022
“Global Convergence of Sub-gradient Method on Factorized Models”
8. **INFORMS Annual Meeting**, virtual, October 2021,
“Scalable Inference of Sparsely-changing Markov Random Fields”
9. **Federal Energy Regulatory Commission**, virtual, June 2021,
“Absence of Spurious Local Trajectories in Time-varying Optimal Power Flow”
10. **Modeling and Optimization: Theory and Applications (MOPTA)**, virtual, August 2021,
“Implicit Regularization of Sub-gradient Method in Robust Matrix Recovery”
11. **University of Michigan**, Controls Group, October, 2020,
“Learning and Control of Linear Dynamical Systems in High Dimensions”
12. **Arizona State University**, Department of Industrial Engineering, Tempe, AZ, January, 2020,
“Scalable and Guaranteed Computation for Structured Systems”
13. **University of Illinois Urbana-Champaign**, Department of Industrial and Enterprise Systems Engineering, Champaign, IL, January, 2020,
“Scalable and Guaranteed Computation for Structured Systems”
14. **University of Michigan**, Department of Industrial and Operations Engineering, Ann Arbor, MI, January, 2020,
“Scalable and Guaranteed Computation for Structured Systems”
15. **MIT Sloan**, School of Management, Operations Research and Statistics Group, Cambridge, MA, January, 2020,
“Scalable and Guaranteed Computation for Structured Systems”
16. **Purdue University**, Department of Industrial Engineering, West Lafayette, IN, January, 2020,
“Scalable and Guaranteed Computation for Structured Systems”
17. **University of Pittsburgh**, Department of Industrial Engineering, Pittsburgh, PA, January, 2020,
“Scalable and Guaranteed Computation for Structured Systems”
18. **INFORMS Annual Meeting**, Seattle, WA, October, 2019,
“Exact Guarantees On the Absence of Spurious Local Minima For Non-negative Robust Principal Component Analysis”
19. **INFORMS Annual Meeting**, Seattle, WA, October, 2019,
“Learning Large-scale Sparse Graphical Models: Theory and Algorithm”
20. **SIAM Conference on Computational Science and Engineering (CSE19)**, Spokane, WA, February, 2019,
”Learning Large-Scale Sparse Graphical Models: Theory, Algorithm”
21. **13th Data Mining & Decision Analytics Workshop**, Phoenix, AZ, November, 2018,
“Graphical Lasso and Thresholding: Equivalence and Closed-form Solutions”
22. **INFORMS Annual Meeting**, Phoenix, AZ, November, 2018,
“A Bound Strengthening Method for Optimal Transmission Switching in Power Systems”

23. **INFORMS Annual Meeting**, Phoenix, AZ, November, 2018,
“Data Driven Sparse System Identification”
24. **Federal Energy Regulatory Commission (FERC)**, conference on *Increasing Market and Planning Efficiency through Improved Software*, Washington, DC, July, 2017,
“Convex Formulation of the Optimal Transmission Switching Problem”
25. **Tsinghua-Berkeley Shenzhen Institute**, Berkeley, CA, November, 2017,
“Structural Optimization: From Power Systems to Machine Learning”
- **Best Poster Presentation Award - Second Place**
26. **INFORMS Annual Meeting**, Houston, TX, October, 2017,
“Promises of Conic Relaxations in Optimal Transmission Switching of Power Systems”
27. **INFORMS Annual Meeting**, Houston, TX, October, 2017,
“Power System State Estimation Problem: Optimal Sensor Placement”
28. **INFORMS Annual Meeting**, Houston, TX, October, 2017,
“Data-driven Methods for Learning Graphical Models”
29. **Defense Advanced Research Projects Agency (DARPA)**, Young Faculty Award Meeting, Arlington, VA, October, 2016,
“Near-Global Solutions of Non-convex Problems”
30. **Modeling and Optimization: Theory and Applications (MOPTA)**, Lehigh, PA, August 2016,
“On the Convexity of Optimal Decentralized Control Problem and Sparsity Path”
31. **INFORMS Annual Meeting**, Nashville, TN, November, 2016,
“On the Convexity of Optimal Decentralized Control Problem and Sparsity Path”
32. **INFORMS Annual Meeting**, Nashville, TN, November, 2016,
“Optimal Distributed Control of Power Systems with a High Level of Renewable Energy”

TEACHING

University of Michigan:

- IOE 473: Advanced Data Analytics Winter 2023
Instructor, Undergraduate Course, IOE
- IOE611: Nonlinear Programming Fall 2022
Instructor, Graduate Course, IOE
- IOE491: Advanced Topics in Applied Data Analytics Winter 2022
Instructor, Undergraduate Course, IOE
- IOE611: Nonlinear Programming Fall 2021
Instructor, Graduate Course, IOE
- IOE491: Advanced Topics in Applied Data Analytics Winter 2021
Instructor, Undergraduate Course, IOE

UC Berkeley:

- Learning and Optimization Spring 2020
Teaching Assistant, Graduate Course, IEOR
- Applied Dynamic Programming Spring 2018
Guest Lecturer and Teaching Assistant, Graduate Course, IEOR

- Nonlinear and Discrete Optimization Fall 2016
Guest Lecturer and Teaching Assistant, Undergraduate Course, IEOR
- Nonlinear and Discrete Optimization Fall 2015
Guest Lecturer and Teaching Assistant, Undergraduate Course, IEOR

Columbia University:

- Convex Optimization for Electrical Engineering Spring 2014
Teaching Assistant, Graduate Course, EE

ADVISING
EXPERIENCE

PhD Students:

- Geyu Liang, University of Michigan (IOE) Fall 2021 - Present
- Jianhao Ma, University of Michigan (IOE) Winter 2021 - Present
- Aaresh Bhatena, University of Michigan (IOE) Winter 2023 - Present

Masters Students:

- Lingjun Guo, University of Michigan (IOE) Winter 2022 - Present
- Tong Xu, University of Michigan (LSA) Winter 2020 - Summer 2022

Undergraduate Students:

- Weykun Lyu, University of Michigan (CSE and Math) Summer 2021

Other Students:

- Rachel Tham, UC Berkeley (EECS) Summer 2018

Doctoral Committee Membership:

- Kyle Gilman, University of Michigan (EECS) Fall 2022 - Present
- Zhe Du, University of Michigan (EECS) Fall 2021 - Present
- Yi Dai, University of Michigan (ChemE) Fall 2021 - Present
- Hessa Al-Thani, University of Michigan (IOE) Summer 2021 - Present

OUTREACH

- **Mentor in Blavin Scholar Program***, University of Michigan Fall 2022 - present
- **Panelist for Washtenaw College Outreach** Fall 2022
- **Panelist for Oakland Community College Outreach** Fall 2022
- **Panelist for Schoolcraft College Outreach** Fall 2022
- **Member of DEI Task Force**, IOE, University of Michigan Fall 2022
- **Member of DEI Task Force**, IOE, University of Michigan Winter 2022

SERVICES

Industrial and Operations Engineering:

- **Organizer**, Wilbert Steffy Distinguished Lecture Fall 2022
- **Presenter**, IOE Graduate School Workshop Fall 2022

*The Blavin Scholar Program provides students who have experienced time in foster care with comprehensive support in navigating and maximizing their college experience.

- **Seminar Organizer**, IOE Department Seminar Series Fall 2022
- **Prize Committee Member**, Wilson Best Paper Prize Winter 2022
- **Seminar Organizer**, IOE Department Seminar Series Winter 2022
- **Prize Committee Member**, Wilson Best Paper Prize Winter 2021
- **Presenter**, IOE Graduate School Workshop Fall 2021
- **Member**, Graduate Recruitment Task Force Fall 2021
- **Member**, Facilities and Computing Committee Fall 2021

College of Engineering:

- **Proposal Reviewer**, Propelling Original Data Science (PODS) Grants Summer 2022
- **Proposal Reviewer**, MICDE Catalyst Grants Summer 2022
- **College Representative**, Robotics, University of Michigan Winter 2022
Faculty Hiring (one candidate)
- **College Representative**, ECE, University of Michigan Winter 2022
Faculty Hiring (three candidates)
- **College Representative**, CSE, University of Michigan Winter 2022
Faculty Hiring (one candidate)
- **Faculty Mentor** Summer 2021
Summer Undergraduate Research in Engineering (SURE), University of Michigan

Other Services:

- **Signatory Committee Member**, IEOR Graduate Student Organization, UC Berkeley Fall 2019
- **Graduate Mentor**, Winter 2018
Summer Undergraduate Program in Engineering Research at Berkeley (SUPERB)
- **Mentor**, Engineers for a Sustainable World (ESW), UC Berkeley Winter 2018

PROFESSIONAL
ACTIVITIES

- **Area Chair**, Winter 2023
Conference on Neural Information Processing Systems (NeurIPS)
- **NSF Panelist**, Communications and Information Foundations (CIF) program Fall 2022
- **Area Chair**, Fall 2022
International Conference on Artificial Intelligence and Statistics (AISTATS)
- **Session Organizer**, INFORMS Annual Meeting, Indianapolis, IN Fall 2022
Session title: "Recent Advances in Non-convex Optimization I & II"

- **Poster Committee**, Learning for Dynamics & Control Conference Fall 2021

- **Session Organizer**, INFORMS Annual Meeting, Anaheim, CA Fall 2021
Session title: “Recent Advances in Data-driven Non-convex Optimization”

- **Session Organizer**, INFORMS Annual Meeting, National Harbor, MD Fall 2020
Session title: “Optimization, Learning, and Control”

- **Session Organizer**, INFORMS Annual Meeting, Seattle, WA Fall 2019
Session title: “Recent Advances in Large-Scale Optimization”

- **Technical Program Committee** Fall 2018
International Conference on Applied Energy

- **Journal Reviewing**
 - Journal of Machine Learning Research (JMLR)
 - Journal of Optimization Theory and Applications (JOTA)
 - SIAM Journal on Optimization (SIOPT)
 - SIAM Journal on Control and Optimization (SICON)
 - European Journal of Operations Research (EJOR)
 - Annals of Operations Research
 - Optimization and Engineering
 - IEEE Transactions on Automatic Control (TAC)
 - Automatica
 - IEEE Transactions on Smart Grid (TSG)
 - IEEE Transactions on Power Systems (TPS)
 - IEEE Transactions on Control of Network Systems (TCNS)
 - IEEE Control System Letters (CSL)
 - IEEE Access
 - Systems & Control Letters

- **Conference Reviewing**
 - Conference on Neural Information Processing Systems (NeurIPS)
 - International Conference on Machine Learning (ICML)
 - International Conference on Learning Representations (ICLR)
 - International Conference on Artificial Intelligence and Statistics (AISTATS)
 - Conference on Decision and Control (CDC)
 - American Control Conference (ACC)
 - European Control Conference (ECC)
 - International Conference on Machine Learning and Applications (ICMLA)