Mahnoosh Alizadeh

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APPOINTMENTS

University of California Santa Barbara	Santa Barbara, CA
Assistant Professor of Electrical and Computer Engineering	Jan. 2017 –Current

EDUCATION

Stanford University	Stanford, CA
Postdoctoral Scholar - Electrical Engineering	2014-2016
	D : CA
University of California Davis	Davis, CA
Ph.D. in Electrical and Computer Engineering, minor in Mathematics	2009–2014
Sharif University of Technology	Tehran, Iran
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B.Sc. in Electrical Engineering	2004-2009

Honors and Awards

• Best paper award from the power systems track, HICSS-53	2020
• Senior Member of the IEEE	2020
• NSF CAREER Award	2019
• UCSB College of Engineering Northrop Grumman Excellence in Teaching Award	2019
• Invited Participant at the 1st NSF Early-Career Investigators Workshop on CPS in Smart Cities	2015
• Invited Participant at the Rising Stars in EECS workshop, University of California Berkeley	2014
• NSF Student Travel Award, 53rd IEEE Control and Decision Conference (CDC)	2014
• Richard C. Dorf Award for Outstanding Research Accomplishment, UC Davis College of Engineering	2013
• NSF Student Travel Award, 51st IEEE Control and Decision Conference (CDC)	2012

SELECT PROFESSIONAL ACTIVITIES

- Associate Editor IEEE Transactions on Smart Grid (May 2020 present)
- Associate Editor IEEE Power Engineering Letters (May 2020 present)
- Co-Organizer of the upcoming NSF-sponsored workshop "Towards Carbon-neutral Electricity and Mobility: The Infrastructure Challenges and Opportunities", To be held March 2022
- Co-Organizer of the NSF Cyberphysical Systems Program PI meeting, held virtually in June 2021
- Workshops Chair IEEE SmartGridComm (International Conference on Communications, Control, and Computing Technologies for Smart Grids), November 2020
- UCSB Institute for Energy Efficiency research theme co-lead for "Energy-efficient Societal Infrastructure", 2019-present
- Breakout Session Co-Chair on Coupled Power and Transportation Systems, NSF-sponsored Workshop "Forging Connections between Machine Learning, Data Science, & Power Systems Research", 2020

- DOE Office of Technology Transitions Independent Merit Reviewer for Technology Commercialization Fund Proposals, 2020
- NSF panelist for multiple programs such as EPCN, CPS and S&CC, 2018, 2019, 2020, 2021
- IEEE Control Systems Magazine Awards Committee, 2020
- Symposium Chair GlobalSip Symposium "Machine Learning, Optimization and Security for Future Energy Delivery Systems", Ottawa, Canada, 2019
- Co-Organizer of the NSF-sponsored "Workshop on Control for Networked Transportation Systems (CNTS)", Colocated with ACC 2019
- Track Chair (Operation and Control Track), IEEE SmartGridComm (International Conference on Communications, Control, and Computing Technologies for Smart Grids), 2018
- Session Organizer, "Models and Optimization Methods for Future Electricity Markets", INFORMS Annual Meeting 2018
- Member of the technical program committee (TPC) for IEEE SmartGridComm Conference 2014, 2015, and 2017, International Conference on Smart Grids for Smart Cities (SGSC) 2015, ACM/IEEE International Conference on Cyber-Physical Systems (ICCSP) 2017, GlobalSIP 2017 and 2018, ICC 2018
- Member of the IEEE Smart Buildings Loads and Consumer Services (SBLC) paper review working group IEEE PES, 2018 and 2019
- Proposal reviewer for the Bonneville Power Administration (2016), the Research Grants Council of Hong Kong (2017 and 2018)
- Technical reviewer for over 100 journal and conference papers submitted to the IEEE Trans on Smart Grid, IEEE Trans on Power Systems, IEEE Trans on Control of Network Systems, IEEE Trans on Automatic Control, IEEE Trans on Signal Processing, etc.
- President of the Graduate Student Association UC Davis Electrical and Computer Engineering Department (2010-2013)

TEACHING

• Instructor at University of California Santa Barbara

Foundations of Analog and Digital Circuits and Systems (ECE10C) Optimization Models in Engineering (ECE194B)

Spring 2017, '18, '19, '20, '21 Winter 2019, '20, '21

Sharing Network Resources (ECE594B) - Special topics class with focus on smart power systems

Fall 2018, 19

• Teaching Assistant at University of California Davis

Smart Power Systems (EEC289) Probability Theory (EEC161) Spring 2013

Spring 2010

• Teaching Assistant at Sharif University of Technology

Microprocessors I Linear Control Systems Principles of Electrical Engineering Analog Circuits I

Preprints

- [1] A. Moradipari, Y. Abbasi-Yadkori, M. Alizadeh, and M. Ghavamzadeh, "Parameter and feature selection in stochastic linear bandits", [Preprint URL].
- [2] A. Moradipari, M. Ghavamzadeh, and M. Alizadeh, "Collaborative multi-agent stochastic linear bandits", [Preprint URL].

- [3] K. Paarporn, R. Chandan, M. Alizadeh, and J. R. Marden, "A general lotto game with asymmetric budget uncertainty", [Preprint URL].
- [4] K. Paarporn, R. Chandan, M. Alizadeh, and J. R. Marden, "The division of assets in multiagent systems: A case study in team blotto games", [Preprint URL].
- [5] B. Turan, C. A. Uribe, H.-T. Wai, and M. Alizadeh, "On robustness of normalized block coordinate descent method for non-convex optimization", [Preprint URL].
- [6] B. Turan, C. A. Uribe, H.-T. Wai, and M. Alizadeh, "Robust distributed optimization with randomly compromised gradients", [Preprint URL].

JOURNAL PUBLICATIONS

- [1] K. Hreinsson, A. Scaglione, M. Alizadeh, and Y. Chen, "New insights from the Shapley-Folkman lemma on dispatchable demand in energy markets", *IEEE Transactions on Power Systems*, to appear, 2021.
- [2] A. Moradipari, N. Tucker, and M. Alizadeh, "Mobility-aware electric vehicle fast charging load models with geographical price variation", *IEEE Transactions on Transportation Electrification*, vol. 7, no. 2, pp. 554–565, 2021.
- [3] A. Moradipari, S. Amani, M. Alizadeh, and C. Thrampoulidis, "Safe linear Thompson Sampling with side information", *IEEE Transactions on Signal Processing*, to appear, 2021.
- [4] K. Paarporn, M. Alizadeh, and J. R. Marden, "A risk-security tradeoff in graphical coordination games", *IEEE Transactions on Automatic Control*, vol. 66, no. 5, pp. 1973–1985, 2021.
- [5] K. Paarporn, B. Canty, P. N. Brown, M. Alizadeh, and J. R. Marden, "The impact of complex and informed adversarial behavior in graphical coordination games", *IEEE Transactions on Control of Network Systems*, vol. 8, no. 1, pp. 200–211, 2021.
- [6] B. Turan and M. Alizadeh, "Competition in electric Autonomous Mobility-on-Demand systems", *IEEE Transactions on Control of Network Systems*, to appear, 2021.
- [7] N. Tucker, A. Moradipari, and M. Alizadeh, "Constrained Thompson sampling for real-time electricity pricing with grid reliability constraints", *IEEE Transactions on Smart Grid*, vol. 11, no. 6, pp. 4971–4983, 2020.
- [8] B. Turan, R. Pedarsani, and M. Alizadeh, "Dynamic pricing and fleet management for electric autonomous mobility on demand systems", *Transportation Research Part C: Emerging Technologies*, vol. 121, p. 102 829, 2020.
- [9] B. Turan, C. A. Uribe, H.-T. Wai, and M. Alizadeh, "Resilient primal-dual optimization algorithms for distributed resource allocation", *IEEE Transactions on Control of Network Systems*, to appear, 2020.
- [10] A. Moradipari and M. Alizadeh, "Pricing and routing mechanisms for differentiated services in an electric vehicle public charging station network", *IEEE Transactions on Smart Grid*, vol. 11, no. 2, pp. 1489–1499, 2019.
- [11] F. Rossi, R. Iglesias, M. Alizadeh, and M. Pavone, "On the interaction between Autonomous Mobility-on-Demand systems and the power network: Models and coordination algorithms", *IEEE Transactions on Control of Network Systems*, vol. 7, no. 1, pp. 384–397, 2019.
- [12] N. Tucker and M. Alizadeh, "An online admission control mechanism for electric vehicles at public parking infrastructures", *IEEE Transactions on Smart Grid*, vol. 11, no. 1, pp. 161–170, 2019.
- [13] M. Alizadeh, H.-T. Wai, A. Goldsmith, and A. Scaglione, "Retail and wholesale electricity pricing considering electric vehicle mobility", *IEEE Transactions on Control of Network Systems*, vol. 6, no. 1, pp. 249–260, 2018.

- [14] M. Alizadeh, H.-T. Wai, M. Chowdhury, A. Goldsmith, A. Scaglione, and T. Javidi, "Optimal pricing to manage electric vehicles in coupled power and transportation networks", *IEEE Transactions on Control of Network Systems*, vol. 4, no. 4, pp. 863–875, 2016.
- [15] M. Alizadeh, A. Scaglione, A. Applebaum, G. Kesidis, and K. Levitt, "Reduced-order load models for large populations of flexible appliances", *IEEE Transactions on Power Systems*, vol. 30, no. 4, pp. 1758–1774, 2014.
- [16] M. Alizadeh, Y. Xiao, A. Scaglione, and M. Van Der Schaar, "Dynamic incentive design for participation in direct load scheduling programs", *IEEE Journal of Selected Topics in Signal Processing*, vol. 8, no. 6, pp. 1111–1126, 2014.
- [17] M. Alizadeh, A. Scaglione, J. Davies, and K. S. Kurani, "A scalable stochastic model for the electricity demand of electric and plug-in hybrid vehicles", *IEEE Transactions on Smart Grid*, vol. 5, no. 2, pp. 848–860, 2013.
- [18] T.-H. Chang, M. Alizadeh, and A. Scaglione, "Real-time power balancing via decentralized coordinated home energy scheduling", *IEEE Transactions on Smart Grid*, vol. 4, no. 3, pp. 1490–1504, 2013.
- [19] M. Alizadeh, X. Li, Z. Wang, A. Scaglione, and R. Melton, "Demand-side management in the smart grid: Information processing for the power switch", *IEEE Signal Processing Magazine*, vol. 29, no. 5, pp. 55–67, 2012.
- [20] M. Alizadeh, A. Scaglione, and R. J. Thomas, "From packet to power switching: Digital direct load scheduling", *IEEE Journal on Selected Areas in Communications*, vol. 30, no. 6, pp. 1027–1036, 2012.

CS-STYLE CONFERENCE PROCEEDINGS

- [1] A. Moradipari, C. Thrampoulidis, and M. Alizadeh, "Stage-wise conservative linear bandits", in Advances in Neural Information Processing Systems (NeurIPS), 2020.
- [2] S. Amani, M. Alizadeh, and C. Thrampoulidis, "Linear stochastic bandits under safety constraints", in Advances in Neural Information Processing Systems (NeurIPS), 2019, pp. 9256–9266.

BOOK CHAPTERS

[1] A. Scaglione, Z. Wang, and M. Alizadeh, "New models for networked control in smart grid", in *Smart Grid Communications and Networking*, Cambridge Univ. Press, 2012.

Conference Proceedings

- [1] S. Amani, M. Alizadeh, and C. Thrampoulidis, "Regret bounds for safe Gaussian process bandit optimization", in *IEEE International Symposium on Information Theory (ISIT)*, 2021.
- [2] B. Turan, C. A. Uribe, H.-T. Wai, and M. Alizadeh, "On robustness of the normalized subgradient method with randomly corrupted subgradients", in *American Control Conference (ACC)*, 2021.
- [3] S. Amani, M. Alizadeh, and C. Thrampoulidis, "Generalized linear bandits with safety constraints", in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2020, pp. 3562–3566.
- [4] S. Amani, M. Alizadeh, and C. Thrampoulidis, "Regret bounds for safe Gaussian process bandit optimization", in *Learning for Dynamics and Control*, PMLR, 2020, pp. 158–159.
- [5] K. Hreinsson, A. Scaglione, and M. Alizadeh, "An aggregate model of the flexible energy demand of thermostatically controlled loads with explicit outdoor temperature dependency", in *HICSS-53*, 2020.

- [6] A. Moradipari, M. Alizadeh, and C. Thrampoulidis, "Linear Thompson sampling under unknown linear constraints", in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2020, pp. 3392–3396.
- [7] A. Moradipari, N. Tucker, T. Zhang, G. Cezar, and M. Alizadeh, "Mobility-aware smart charging of electric bus fleets", 2020.
- [8] K. Paarporn, M. Alizadeh, and J. R. Marden, "Risk and security tradeoffs in graphical coordination games", in 2019 IEEE 58th Conference on Decision and Control (CDC), 2019, pp. 4409–4414.
- [9] K. Paarporn, R. Chandan, M. Alizadeh, and J. R. Marden, "Characterizing the interplay between information and strength in Blotto games", in *IEEE 58th Conference on Decision and Control (CDC)*, 2019, pp. 5977–5982.
- [10] N. Tucker, B. Ferguson, and M. Alizadeh, "An online pricing mechanism for electric vehicle parking assignment and charge scheduling", in *American Control Conference (ACC)*, 2019, pp. 5755–5760.
- [11] N. Tucker, B. Turan, and M. Alizadeh, "Online charge scheduling for electric vehicles in autonomous mobility on demand fleets", in *IEEE Intelligent Transportation Systems Conference (ITSC)*, 2019, pp. 226–231.
- [12] B. Turan, N. Tucker, and M. Alizadeh, "Smart charging benefits in Autonomous Mobility-on-Demand systems", in *IEEE Intelligent Transportation Systems Conference (ITSC)*, 2019, pp. 461–466.
- [13] C. A. Uribe, H.-T. Wai, and M. Alizadeh, "Resilient distributed optimization algorithms for resource allocation", in *IEEE 58th Conference on Decision and Control (CDC)*, 2019, pp. 8341–8346.
- [14] B. Canty, P. N. Brown, M. Alizadeh, and J. R. Marden, "The impact of informed adversarial behavior in graphical coordination games", in *IEEE Conference on Decision and Control (CDC)*, 2018, pp. 1923–1928.
- [15] B. Ferguson, V. Nagaraj, E. C. Kara, and M. Alizadeh, "Optimal planning of workplace electric vehicle charging infrastructure with smart charging opportunities", in 21st International Conference on Intelligent Transportation Systems (ITSC), 2018, pp. 1149–1154.
- [16] A. Moradipari and M. Alizadeh, "Pricing differentiated services in an electric vehicle public charging station network", in *IEEE Conference on Decision and Control (CDC)*, 2018, pp. 6488–6494.
- [17] A. Moradipari, C. Silva, and M. Alizadeh, "Learning to dynamically price electricity demand based on multi-armed bandits", in *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, 2018, pp. 917–921.
- [18] F. Rossi, R. Iglesias, M. Alizadeh, and M. Pavone, "On the interaction between Autonomous Mobility-on-Demand systems and the power network: Models and coordination algorithms", in *Robotics: Science and Systems (RSS)*, 2018.
- [19] N. Tucker and M. Alizadeh, "Online pricing mechanisms for electric vehicle management at workplace charging facilities", in 56th Annual Allerton Conference on Communication, Control, and Computing (Allerton), 2018, pp. 351–358.
- [20] M. A. Abdelghany, H. Mohsenian-Rad, and M. Alizadeh, "Wholesale electricity pricing in the presence of geographical load balancing", in 51st Asilomar Conference on Signals, Systems, and Computers, 2017, pp. 653–658.
- [21] M. Alizadeh, H.-T. Wai, A. Goldsmith, and A. Scaglione, "Marginal charging station pricing in an intelligent electric transportation system", in *American Control Conference (ACC)*, 2017, pp. 3438–3444.
- [22] M. Alizadeh, H.-T. Wai, A. Goldsmith, and A. Scaglione, "Optimal electricity pricing for societal infrastructure systems", in *Proceedings of the 50th Hawaii International Conference on System Sciences*, 2017.

- [23] P. Wong and M. Alizadeh, "Congestion control and pricing in a network of electric vehicle public charging stations", in 55th Annual Allerton Conference on Communication, Control, and Computing (Allerton), 2017, pp. 762–769.
- [24] M. Alizadeh, A. Goldsmith, and A. Scaglione, "The perils of dynamic electricity pricing tariffs in the presence of retail market imperfections", in 49th Asilomar Conference on Signals, Systems and Computers, 2015, pp. 683–688.
- [25] M. Alizadeh, A. Scaglione, A. Goldsmith, and G. Kesidis, "Capturing aggregate flexibility in demand response", in 53rd IEEE conference on decision and control, 2014, pp. 6439–6445.
- [26] M. Alizadeh, H.-T. Wai, A. Scaglione, A. Goldsmith, Y. Y. Fan, and T. Javidi, "Optimized path planning for electric vehicle routing and charging", in 52nd Annual Allerton Conference on Communication, Control, and Computing (Allerton), 2014, pp. 25–32.
- [27] M. Alizadeh, T.-H. Chang, and A. Scaglione, "On modeling and marketing the demand flexibility of deferrable loads at the wholesale level", in 46th Hawaii International Conference on System Sciences, 2013, pp. 2177–2186.
- [28] M. Alizadeh, G. Kesidis, and A. Scaglione, "Clustering consumption in queues: A scalable model for electric vehicle scheduling", in *Asilomar Conference on Signals, Systems and Computers*, 2013, pp. 374–378.
- [29] M. Alizadeh and A. Scaglione, "Least laxity first scheduling of thermostatically controlled loads for regulation services", in *IEEE Global Conference on Signal and Information Processing*, 2013, pp. 503–506.
- [30] M. Alizadeh, A. Scaglione, and G. Kesidis, "Scalable model predictive control of demand for ancillary services", in *IEEE International Conference on Smart Grid Communications (SmartGridComm)*, 2013, pp. 684–689.
- [31] M. Alizadeh, Y. Xiao, A. Scaglione, and M. Van Der Schaar, "Incentive design for direct load control programs", in 51st Annual Allerton Conference on Communication, Control, and Computing, 2013, pp. 1029–1036.
- [32] M. Alizadeh, T.-H. Chang, and A. Scaglione, "Grid integration of distributed renewables through coordinated demand response", in 51st IEEE Conference on Decision and Control (CDC), 2012, pp. 3666–3671.
- [33] M. Alizadeh, T.-H. Chang, A. Scaglione, C. Chen, and S. Kishore, "The emergence of deferrable energy requests and a greener future: What stands in the way?", in 5th International Symposium on Communications, Control and Signal Processing, 2012.
- [34] M. Alizadeh, Z. Wang, A. Scaglione, C. Chen, and S. Kishore, "On the market effects of queueing energy requests as an alternative to storing electricity", in *IEEE Power and Energy Society General Meeting*, 2012.
- [35] T.-H. Chang, M. Alizadeh, and A. Scaglione, "Coordinated home energy management for real-time power balancing", in *IEEE Power and Energy Society General Meeting*, 2012.
- [36] C. Chen, S. Kishore, Z. Wang, M. Alizadeh, and A. Scaglione, "A Cournot game analysis on market effects of queuing energy request as demand response", in *IEEE Power and Energy Society General Meeting*, 2012.
- [37] C. Chen, S. Kishore, Z. Wang, M. Alizadeh, and A. Scaglione, "How will demand response aggregators affect electricity markets?—a Cournot game analysis", in 5th International Symposium on Communications, Control and Signal Processing, 2012.
- [38] A. Scaglione, M. Alizadeh, and R. J. Thomas, "Queuing models for providing quality of service to transactive loads", in *IEEE PES Innovative Smart Grid Technologies (ISGT)*, 2012.

- [39] M. Alizadeh, A. Scaglione, and R. J. Thomas, "Direct load management of electric vehicles", in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2011, pp. 5964–5967.
- [40] M. Alizadeh, A. Scaglione, R. J. Thomas, and D. Callaway, "Information infrastructure for cellular load management in green power delivery systems", in *IEEE International Conference on Smart Grid Communications (SmartGridComm)*, 2011, pp. 13–18.
- [41] M. Alizadeh, Z. Wang, and A. Scaglione, "Demand side management trends in the power grid", in 4th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), 2011, pp. 141–144.
- [42] M. Alizadeh, A. Scaglione, and Z. Wang, "On the impact of smartgrid metering infrastructure on load forecasting", in 48th Annual Allerton Conference on Communication, Control, and Computing (Allerton), 2010, pp. 1628–1636.

SELECT TALKS

- Tutorial lecture on "Robust optimization in cyber-physical systems with applications in electricity demand response", 5th IEEE Colombian Conference on Automatic Control (CCAC), Oct. 2021.
- "Learning to Manage Electricity Demand with Grid Reliability Constraints", Presentation at the PES General Meeting, Jul. 2021.
- "Learning to Optimize Electricity Demand", Oral Presentation at CPS PI meeting, Jun. 2021.
- "Learning to Optimize Demand in Safety-critical Systems", UCSD Controls seminar, Dec. 2020.
- "Learning and Control Algorithms for Electricity Demand Response with Humans in the Loop", Presentation at the PES General Meeting, Jul. 2020.
- "Safety-constrained Learning Algorithms for Demand Management", Stanford Smart Grid Seminar, Oct. 2019.
- "Safety-constrained Learning Algorithms for Demand Management", USC Cyberphysical Systems Seminar, Oct. 2019.
- "Towards Sustainable Electric Transportation Systems", Presentation at the IEEE Central Coast Chapter, Oct. 2019.
- "Reliability-Aware Real-time Pricing of Electricity Based on Bandit Heuristics", Invited talk at the Allerton Conference, Oct. 2019.
- "Control and Incentive Design for Smart Cities", Plenary speaker at Spatial Conference at USCB, 2019
- "Mobility-Aware Load Management Algorithms for Electric Vehicles", Invited talk at the Isaac Newton Institute, Cambridge UK, May 2019.
- "Pricing Differentiated Services in Electric Vehicle Public Charging Station Networks", INFORMS Annual Meeting, Nov. 2018.
- "Green transportation systems", Invited presentation at the 8th International Conference on the Internet of Things, Oct. 2018.
- "Electricity Demand Management for Networked Infrastructure Systems", Sustainable Power and Energy Seminar, University of Michigan, Nov. 2017.
- "Intelligent Infrastructure for a Sustainable Future", ECE department seminar, Texas A&M University, Mar. 2017.
- "Intelligent Infrastructure for a Sustainable Future", Bits & Watts Community Seminar, Stanford, CA, Jun. 2016.
- "Optimizing Intelligent Infrastructure Coupled With The Power Grid", Invited presentation, INFORMS Meeting, Nov. 2015
- "Cyber-enabled Optimization of User Behavior in Smart Infrastructure", Carnegie Mellon University Energy and Information Seminar, Dec. 2014.
- "Harnessing the Electric Load Flexibility of Energy-conscious Intelligent Transportation Systems", INFORMS Meeting, Nov. 2014.
- "Multi-stage Stochastic Decision Making Framework for Providing Ancillary Services with Active Demand", Invited presentation, INFORMS Meeting, Oct. 2013.

- Invited Research Overview Talk at the Trustworthy Cyber Infrastructure for the Power Grid (TCIPG) All-hands Meeting, Feb. 2013.
- "Electric Vehicles, Renewables and a Greener Future: What stands in the way?", Lawrence Berkeley National Lab (LBNL) Demand Response Research Center Meeting, Oct. 2011.

Funded Projects

- The National Science Foundation "CAREER: Learning and Control Algorithms for Electricity Demand Response with Humans-in-the-Loop" 2019-2024 (\$500,000)
- UCSB Institute for Energy Efficiency "Distributed and Safe Real-time Control Mechanisms for Community Energy Management", 2020-2021 (\$50k Joint with R. Pedarsani)
- The National Science Foundation "SCC-IRG Track 2: Smart & Connected Kids for Sustainable Energy Communities" 2017-2018 (\$120,000)
- California Energy Commission "SCRIPT (Smart Charging Infrastructure Planning Tool)" 2018-2020 (\$300,708)
- California Energy Commission "Demonstration of Vehicle-Grid Integration Benefits Under Non-residential Scenarios" 2019-2021 (\$316,391)
- University of California Office of the President "UC-Lab Center for Electricity Distribution Cybersecurity" 2018-2020 (\$300,000)
- The National Science Foundation "CPS: Small: Collaborative Research: Models and System-Level Coordination Algorithms for Power-in-the-Loop Autonomous Mobility-on-Demand Systems" 2019-2021 (\$200,000)

ADVISING

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•	Ahmadreza Moradipari	Oct. 2017–Expected Sep. 2	2021
•	Nathaniel Tucker	Oct. 2017–Expected Sep. 2	2021
•	Berkay Turan	Oct. 2018–Expected Sep. 2	2023

Postdoctoral Scholars

• Keith Paarporn (jointly advised with J.R. Marden)	Sep. 2018–Current
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M.Sc. Students

•	Brian Canty (jointly advised with J.R. Marden)	Sep.	2017–Mar. 2019
•	Varun Nagaraj	Jun.	2017 -Aug 2018

Undergraduare Researchers

• Gil Marc Sia (Freshman ECE student)	Jun. 2021 –Current
• Kelly Lin (Sophomore ECE student)	Jul. 2020 –Current
• Tuo Zhang (currently PhD student at USC)	Apr. 2019 –Mar. 2020
• Bryce Ferguson (currently PhD student at UCSB)	Jun. 2017 –Jul. 2018
• Cody Silva (currently M.Sc. student at UCSB)	Sep. 2017 –Dec. 2017