

Masoud Nazari

ACADEMIC POSITIONS	Assistant Professor Department of Electrical & Computer Engineering Wayne State University Assistant Professor Department of Electrical Engineering California State University, Long Beach (CSULB) Post-Doctoral Fellow School of Electrical and Computer Engineering, Georgia Institute of Technology , Atlanta, GA Hosts: <i>Magnus Egerstedt and Santiago Grijalva</i>	July 2019 to present Aug. 2015 to July 2019 Jan. 2013 to Aug. 2015
EDUCATION	<i>Dual Ph.D.</i> , Carnegie Mellon University , Pittsburgh, PA Electrical & Computer Engineering / Engineering & Public Policy (Large-scale Power Systems Computation and Control) Advisor: <i>Marija Ilic</i> PhD Dissertation: <i>Making the Most out of Distributed Generation without Endangering Normal Operation: A Model-Based Policy-Technical Approach</i> <i>Visiting Scholar</i> , Massachusetts Institute of Technology , Cambridge, MA Engineering Systems Division <i>M.S.</i> , Carnegie Mellon University , Pittsburgh, PA Engineering & Public Policy <i>M.S.</i> , Sharif University of Technology , Tehran, Iran Energy Systems Engineering (Energy Systems Modeling and Control) <i>B.S.</i> , <i>Khaje Nasir Toosi University of Technology</i> , Tehran, Iran Electrical Engineering	Jan. 2007 to Sep. 2012 2011 Dec. 2010 Aug. 2005 Aug. 2003
PRINCIPLE FIELDS OF INTEREST	Cyber-Physical Systems: Smart Buildings, Smart Grids, Autonomous Systems; Internet of Things and Data Analytics Energy Management; Resilient Autonomous Management of Distributed Energy Resources and Electric Vehicles; Large-scale Cyber-Physical Energy Networks Computation and Data Analysis.	
RESEARCH AWARDS	California Energy Commission, Award Number EPC-16-033: <i>Internet of Things and Ubiquitous Sensing in University Building Energy Management: Design Optimization and Technology Demonstration</i> PI: Masoud H. Nazari (CSULB) Co-PIs: Hamed Mohsenian-Rad (UC Riverside), Paul Wingco (CSULB), Enlighted Inc., ControlWorks Inc., Wayne State University Project Period: June, 2017 to September, 2020 Award Amount: \$2,509,946 Co-funded Amount: \$1,072,958 Amount will be transferred to Wayne State: \$249,000 CSULB Faculty Small Grant (SEED Fund): <i>Model Predictive Energy Management for Building Microgrids with Controllable Loads: A Case Study at the CSULB-ECS Building</i> Single PI: Masoud H. Nazari	

Project Period: June, 2019 to June, 2020
Amount: \$5,000

CSULB Faculty Small Grant (SEED Fund): *Smart Building Design: Optimal Placement of Advanced Sensors and Actuators for Energy Efficiency and Demand Side Management*
Single PI: Masoud H. Nazari

Project Period: June, 2018 to June, 2019
Amount: \$5,000

CSULB Faculty Small Grant (SEED Fund): *Designing a Customized Energy Efficiency and Demand Side Management System in University Buildings*

Single PI: Masoud H. Nazari
Project Period: June, 2017 to June, 2018
Amount: \$5,000

CSULB Faculty Small Grant (SEED Fund): *Zero Net Energy Building Management System*

Single PI: Masoud H. Nazari
Project Period: June, 2016 to June, 2017
Amount: \$5,000

CSULB Student Summer Research Award: *Campus Microgrid Simulation and Design*
Faculty Advisor: Masoud H. Nazari

Project Period: May, 2016 to Aug., 2016
Amount: \$5,000

NASA, SBIR Phase II NNX14CC34P: *Holomorphic Embedded Load Flow for Autonomous Spacecraft Power Systems*

PI: Gridquant Technologies
(Nazari contributed as consultant)
Project Period: Oct. 2014 to Mar., 2015
Amount: \$750,000

HONORS AND AWARDS

Best Paper Award in 49th North American Power Symposium at Morgantown, West Virginia, Sep. 2017.

Awarded Portugal Science and Technology Foundation PhD Fellowship, Sep. 2007.

Ranked 1st place in the Nationwide Azad University Exam for graduate studies in Physics, Iran, 2005.

Nazari has supervised graduate students who received following awards:

Graduate Dean's List Recipient of Scholars and Artists CSU Long Beach, May 2018.

HOGAR Graduate Student Fellowship CSU Long Beach 2016, 2017.

SUBMITTED PROPOSALS

National Science Foundation, NSF 17-537 *CAREER: Communication-Failure-Resilient Distributed Optimization and Control Architecture for Multi-Agent Power Grids*

PI: **Masoud Nazari**

Amount: \$ 500,001

Project Status: Full Proposal Submitted

Department of Energy, DE-FOA-0002090: *Cyber-physical Integrated Threat Awareness, Layered Defense, and Attack-Tolerant Control Solution for IoT-based Building Energy Management System*

Lead PI: *Hamed Mohsenian-Rad (UC Riverside)*

Wyane State University-PI: **Masoud Nazari**

Wayne State Amount: \$ 250,000

Project Status: Full Proposal Submitted

MEDIA COVERAGE	<i>Electrical Engineering Grad Student Wins A Best Paper Award at NAPS</i> , Long Beach State College of Engineering News, Oct. 9, 2017. http://web.csulb.edu/colleges/coe/news/?p=12031	
	<i>Engineering Building To Get “Smart”</i> , Inside CSULB, June 5, 2017. http://web.csulb.edu/misc/inside/2017/06/05/engineering-building-to-get-smart/	
	<i>A \$ 2.5 Million Grant Will Make Engineering Building Energy Efficient</i> , CSULB Front Page, Mar. 22, 2017. https://www.csulb.edu/article/a-25-million-grant-will-make-engineering-building-energy-efficient	
	<i>CSULB Research Foundation Receives \$2.5 Million Grant</i> , Daily 49er, Mar. 14, 2017. http://www.daily49er.com/news/2017/03/14/csulb-research-foundation-receives-2-5-million-grant/	
	<i>Power Grids With Smarts</i> , Inside CSULB, Apr. 18, 2016. http://web.csulb.edu/misc/inside/2016/04/18/power-grids-with-smarts/	
RESEARCH AND WORK EXPERIENCE	Assistant Professor	July 2019 to present
	Department of Electrical & Computer Engineering Wayne State University	
	Assistant Professor	Aug. 2015 to July 2019
	Department of Electrical Engineering California State University, Long Beach	
	Post-Doctoral Fellow	Jan. 2013 to Aug. 2015
	School of Electrical and Computer Engineering, Georgia Institute of Technology , Atlanta, GA	
	Consultant	Oct. 2014 to Mar. 2015
	<i>Gridquant Technologies LLC</i> , Duluth, GA (Developing an autonomous power system management and control for deep-space vehicles)	
	Post-Doctoral Fellow	Sep. 2012 to Dec. 2012
	Electric Energy Systems program, Carnegie Mellon University , Pittsburgh, PA	
	Research Assistant	Jan. 2007 to Sep. 2012
	Engineering and Public Policy Department, Carnegie Mellon University , Pittsburgh, PA	
	Visiting Scholar/Research Assistant	Jan. 2011 to Aug. 2011
	MIT Energy Initiative, Engineering Systems Division Massachusetts Institute of Technology , Cambridge, MA	
	Visiting Scholar/Research Assistant	Sep. 2009 to Sep. 2010
	INESC-Porto, University of Porto, Portugal	
	Research Assistant	Aug. 2003 to Dec. 2006
	Sharif University of Technology, Tehran, Iran	
PUBLICATIONS	Journal Papers and Book Chapters	

1. **Nazari, M. H.**, Wang, L.Y., Grijalva, S., and Egerstedt, M., *Communication-Failure-Resilient Distributed Frequency Control in Smart Grids: Part 1: Architecture and Distributed Algorithms*, IEEE Transactions on Smart Grid, Accepted (Early Access).
2. **Nazari, M. H.**, Wang, L.Y., Grijalva, S., and Egerstedt, M., *Communication-Failure-Resilient Distributed Frequency Control in Smart Grids: Part 2: Algorithmic implementation and System Simulations*, IEEE Transactions on Smart Grid, Conditionally Accepted.
3. **Nazari, M. H.**, and Wang, L.Y., *Communication-Delay-Tolerant MIMO Architecture for Distributed Frequency Control*, IEEE Transactions on Smart Grid, Under Review.
4. Ramachandan, T., **Nazari, M. H.**, Grijalva, S., and Egerstedt, M., *Overcoming Communication Delays in Distributed Frequency Control*, in IEEE Transactions on Power Systems, vol. 31, no. 4, pp. 2965-2973, July 2016.
5. **Nazari, M. H.**, Costello, Z., Feyzollahi, J., Grijalva, S., and Egerstedt, M., *Distributed Frequency Control of Prosumer-based Electric Energy Systems*, IEEE Transactions on Power Systems, 29(6), pp. 2934-2942, Nov. 2014.
6. **Nazari, M. H.** and Ilic, M., *Dynamic Modelling and Control of Distribution Energy Systems: Comparison with Transmission Power Systems*, Generation, Transmission & Distribution, IET, 8(1), pp. 26-34, Jan. 2014.
7. **Nazari, M. H.**, *Electrical Networks of the Azores Archipelago*, Chapter 3, Engineering IT-Based Electricity Services of the Future: the Case of Low-Cost Green Azores Islands, Springer, 2013.
8. **Nazari, M. H.**, *Optimal Placement of Wind Power Plants for Delivery Loss Minimization*, Chapter 12, Engineering IT-Based Electricity Services of the Future: the Case of Low-Cost Green Azores Islands, Springer, 2013.
9. **Nazari, M. H.**, *Small-Signal Stability of Electric Power Systems on the Azores Archipelago*, Chapter 17, Engineering IT-Based Electricity Services of the Future: the Case of Low-Cost Green Azores Islands, Springer, 2013.
10. **Nazari, M. H.**, Ilic, M., and Lopes, J. P., *Small-Signal Stability and Decentralized Control Design for Electric Energy Systems with Large Penetration of Distributed Generators*, Control Engineering Practice, 20(9), pp. 823-831, 2012.

Peer-Reviewed Proceedings

1. **Nazari, M., H.**, Wang, L. Y., Nguyen, T., and Yin, G., *Impact of Communication Packet Delivery Ratio on Distributed Power Dispatch in Cyber-Physical Power Systems*, 2020 European Control Conference, May 12-15, 2020, Saint Petersburg, Russia, Submitted.
2. Samaniy, E., Khalediany, P., Aligholiany, A., Papalexakis, E., Cun, S., **Nazari, M., H.**, and Mohsenian-Rad, H., *Anomaly Detection in IoT-Based PIR Occupancy Sensors to Improve Building Energy Efficiency*, 2020 IEEE Power & Energy Society Innovative Smart Grid Technologies (IGST), Submitted.
3. Tran, D., Sanchez, E., **Nazari, M., H.**, *Model Predictive Energy Management for Building Microgrids with IoT-based Controllable Loads*, 2019 North American Power Symposium (NAPS), Wichita, KS, Accepted.

4. Tran, D., **Nazari, M., H.**, Sadeghi-Mobarakeh, A., and Mohsenian-Rad, H., *Smart Building Design: A Framework for Optimal Placement of Advanced Sensors and Actuators*, 2019 IEEE Power & Energy Society Innovative Smart Grid Technologies (IGST), Washington, DC, 2019, pp. 1-6.
5. Sanchez, E. and **Nazari, M., H.**, *Model Predictive Energy Scheduling for Building Microgrid*, 2017 North American Power Symposium (NAPS), Morgantown, WV, 2017, pp. 1-6. (**Best Paper Award**)
6. Fares, A., **Nazari, M., H.**, Castaneda, J., Chassiakos, A., *Two-Area System Analysis and Control Using Real-Time Digital Simulator*, 2016 IEEE Green Energy and Systems Conference (IGSEC), Long Beach, CA, 2016, pp. 1-7.
7. Sanchez, E. and **Nazari, M., H.**, *Component Validation Process for High Performance Hybrid Electric Race Vehicle*, 2016 IEEE Green Energy and Systems Conference (IGSEC), Long Beach, CA, 2016, pp. 1-8.
8. **Nazari, M. H.**, Grijalva, S., and Egerstedt, M., *Distributed Frequency Regulation in the Presence of Communication Failure*, 2016 IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT), Minneapolis, MN, 2016, pp. 1-5.
9. Chukwuka, V., **Nazari, M. H.**, Grijalva, S., *Enhancing Communications Reliability in Prosumer-Based Smart Grid using MIMO Communications*, 2016 Clemson University Power Systems Conference (PSC), Clemson, SC, 2016, pp. 1-5.
10. Ramachandan, T., **Nazari, M. H.**, and Egerstedt, M., *Controllability of Prosumer-based Networks in the Presence of Communication Failures*, 2015 54th IEEE Conference on Decision and Control (CDC), Osaka, 2015, pp. 4770-4775. (**Invited Paper**)
11. **Nazari, M., H.**, *A Distributed Framework for Frequency Regulation in Large-scale Prosumer-based Power Systems*, 2015 IEEE Green Energy and Systems Conference (IGESC), Long Beach, CA, 2015, pp. 55-60.
12. **Nazari, M. H.**, Ilic, M., and Morgan, G., *Toward Model-based Policy Design for Reliable and Efficient Integration of Distributed Generators*, 2013 IEEE Power & Energy Society General Meeting, Vancouver, BC, 2013, pp. 1-5.
13. **Nazari, M. H.** and Ilic, M., *A Dynamic Modeling Framework for Future Distribution Energy Systems*, 2012 North American Power Symposium (NAPS), Champaign, IL, 2012, pp. 1-6.
14. **Nazari, M. H.**, *Small-Signal Stability and Centralized Control Design of Modern Distribution Systems*, 2011 North American Power Symposium, Boston, MA, 2011, pp. 1-6.
15. **Nazari, M. H.**, Ilic, M., and Lopes, J. P., *Dynamic Stability and Control Design of Future Electric Energy Systems with Large Penetration of Distributed Generators*, 2010 IREP Symposium Bulk Power System Dynamics and Control - VIII (IREP), Rio de Janeiro, 2010, pp. 1-7.
16. **Nazari, M. H.** and Ilic, M., *Potential for Efficiency Improvement of Future Electric Energy Systems with Distributed Generation units*, IEEE PES General Meeting, Providence, RI, 2010, pp. 1-9.
17. **Nazari, M. H.** and Ilic, M., *Technical Challenge in Modernizing Distribution Electric Power Systems with Large Number of Distributed Generators*, 2009 IEEE Bucharest PowerTech, Bucharest, 2009, pp. 1-8.

18. **Nazari, M. H.**, and Parniani, M., *Determining and Optimizing Power Loss Reduction in Distribution Feeders due to Distributed Generation*, 2006 IEEE PES Power Systems Conference and Exposition, Atlanta, GA, 2006, pp. 1914-1918.
19. Jonker, M., and **Nazari, M. H.**, *Institutional and Technical Modernization of the Power System to Accommodate Distributed Generation*, 4th European Congress on Economics and Management of Energy in Industry, Porto, Portugal, 2007.
20. **Nazari, M. H.**, and Parniani, M., *Evaluating the Effects of Distributed Generation on Radial Distribution Feeders*, 14th Iranian Conf. on Electrical Eng., Tehran, Iran, 2006.

Technical Reports

1. Mohsenian-Rad, H., and **Nazari, M. H.** *Assessment of Impact on Demand Response Across Lighting, HVAC, and Plug-In Load Types: Demand Response Assessment Test Plan*, California Energy Commission, Award Number EPC 16-033, May. 30, 2019.
2. Mohsenian-Rad, H., and **Nazari, M. H.** *Assessment of Impact on Energy Consumption Amounts and Profiles Across Lighting, HVAC, and Plug-in Load Types: Energy Efficiency Assessment Test Plan*, California Energy Commission, Award Number EPC 16-033, May. 28, 2019.
3. Mohsenian-Rad, H., and **Nazari, M. H.** *Assessment of Impact on Building Operations, Occupants, and Equipment (Power Quality): Measurement and Verification Plan*, California Energy Commission, Award Number EPC 16-033, Apr. 30, 2019.
4. **Nazari, M. H.**, and Mohsenian-Rad, H., *Full Scale Demonstration Report: Deployment of Advanced IoT Technologies across the CSULB-ECS Building*, California Energy Commission, Award Number EPC 16-033, Jan. 30, 2019.
5. Mohsenian-Rad, H., and **Nazari, M. H.**, *Anytime Demand Response Test Plan Report*, Demand Reduction Report, California Energy Commission, Award Number EPC 16-033, Dec. 27, 2018.
6. Mohsenian-Rad, H., and **Nazari, M. H.** *Deploying IoT-Based Control Strategies to Reach Maximum Demand Response Capacity*, Anytime Demand Reduction Test Plan Report, California Energy Commission, Award Number EPC 16-033, September 15, 2018.
7. **Nazari, M. H.**, and Mohsenian-Rad, H., *Deploying, Commissioning, and Testing the IoT Network of HVAC Sensors and Actuators*, IoT Network of HVAC Report, California Energy Commission, Award Number EPC 16-033, Aug. 31, 2018.
8. **Nazari, M. H.**, and Mohsenian-Rad, H., *Deploying, Commissioning, and Testing the IoT Network of Plug-in Load Sensors and Actuators*, IoT Network of Plug-in Load Report, California Energy Commission, Award Number EPC 16-033, July 30, 2018.
9. Mohsenian-Rad, H., and **Nazari, M. H.** *Deploying, Commissioning, and Testing the IoT Network of Lighting Sensors and Actuators*, IoT Network of Lighting Report, California Energy Commission, Award Number EPC 16-033, June 15, 2018.
10. **Nazari, M. H.**, and Mohsenian-Rad, H., *Develop IoT-Based Control Strategies to Reach Maximum Energy Efficiency*, Smart Building EMS Software Report, California Energy Commission, Award Number EPC 16-033, May 27, 2018.

11. **Nazari, M. H.**, and Mohsenian-Rad, H., *Refining the Energy Management System (EMS) for Energy Efficiency and Demand Response*, EMS Customization Report, California Energy Commission, Award Number EPC 16-033, Mar. 28, 2018.
12. **Nazari, M. H.**, and Mohsenian-Rad, H., *Refining the Monitoring and Control System Structure for Energy Efficiency and Demand Response*, Implementation Directive Report, California Energy Commission, Award Number EPC 16-033, Feb. 28, 2018.
13. **Nazari, M. H.**, and Mohsenian-Rad, H., *Designing Ubiquitous IoT-Based Sensing and Monitoring Requirements of the Control System*, Data Acquisition Plan Report, California Energy Commission, Award Number EPC 16-033, Feb. 1, 2018.
14. **Nazari, M. H.**, and Mohsenian-Rad, H., *Academic Building Energy Management System Requirement*, Phase I Report, California Energy Commission, Award Number EPC 16-033, Dec. 1, 2017.
15. Grijalva, S. and **Nazari, M. H.**, *Prosumer-Based Distributed Autonomous Cyber-Physical Architecture for Ultra-reliable Green Electricity Internetworks*, Final Scientific Technical Report, US Department of Energy, Award Number DE-AR0000225, May 5, 2015.

Thesis Advised

1. Duc Tran, *Model Predictive Energy Management for Building Microgrids with IoT-based Controllable Loads*, P.hD. California State University, Long Beach / Clairemont Graduate University, Sep. 2019.
2. Ximena Milla, *Smart Building Design*, M.S., California State University, Long Beach, Oct. 2018.
3. Edward Sanchez, *Model Predictive Energy Scheduling for ZNE Building Microgrid*, M.S., California State University, Long Beach, Feb. 2018.
4. Saurabh Pandya, *Smart Building Design: Optimal Placement of Smart Plug-in Load Controllers in Academic Buildings*, M.S., California State University, Long Beach, Nov. 2017.
5. Sanjeev Ramakrishnan, *Feasibility Study of Shunt Capacitor Banks for Power Factor Improvement in Microgrids*, M.S., California State University, Long Beach, Nov. 2017.
6. Mevan Fernando, *Power Quality Improvement in Energy Systems with Weak Interconnection using Static VAR Compensators*, M.S., California State University, Long Beach, Sep. 2017.
7. Abdou Fares, *Two-Area System Control and Stability Improvement using Real-Time Digital Simulator*, M.S., California State University, Long Beach, Mar. 2016.
8. Hari Krishna, *Zero Net Energy Buildings: Feasibility Study at California State University, Long Beach*, M.S., California State University, Long Beach, Dec. 2016.

Posters

1. **Nazari, M. H.**, Mohsenian-Rad, H., *Enhancing Energy Efficiency and Demand Response Capability in University Buildings*, 2019 EPIC Symposium, Sacramento, CA, Feb. 2019.

2. **Nazari, M. H.**, Mohsenian-Rad, H., *IoT-based Smart Building Design*, 2018 EPIC Symposium, Sacramento, CA, Feb. 2018.
3. **Nazari, M. H.**, Costello, Z., Feyzollahi, J., *Distributed Frequency Controller: Responding to Network Perturbations in an Intelligent Manner*, ARPA-E Energy Innovation Summit, Washington D.C., Feb. 2014.
4. **Nazari, M. H.**, and Ilic, M., *Technical and Policy Issues of Modern Electric Energy Systems with a Large Penetration of Distributed Generators*, Carnegie Mellon Portugal Conference, Lisbon, 2010.
5. **Nazari, M. H.**, and Ilic, M., *Policy and Technical Challenges of Modernizing Today's Electric Power Systems*, DYMONDS Consortium, Carnegie Mellon University, Pittsburgh, U.S., Jan. 2008.

Abstract Conference Papers

1. **Nazari, M. H.**, and Ilic, M., *Policy and Technical Challenges in Integrating Distributed Generators*, 5th Carnegie Mellon Electricity Industry Conference, Pittsburgh, U.S. Apr. 2009.
2. **Nazari, M. H.**, and Xie, L., Thatte, A., and Ilic, M., *De-Mystifying Electric Energy Systems*, 5th Carnegie Mellon Electricity Industry Conference, Pittsburgh, U.S. Apr. 2009.
3. **Nazari, M. H.**, and Ilic, M., *Potential Problems and Solutions Associated with Distributed Generation*, 4th Carnegie Mellon Electricity Industry Conference, Pittsburgh, U.S. Apr. 2008.

Invention Disclosure

1. **Nazari, M. H.**, Costello, Z., Feyzollahi, J., Grijalva, S., and Egerstedt, M., *Distributed Frequency Regulation Framework*, US Provisional Patent number 61/928,214, filed 01/16/2014.

Thesis and Dissertation

1. **Nazari, M. H.**, *Making the Most out of Distributed Generation without Endangering Normal Operation: A Model-Based Policy-Technical Approach*, Doctoral of Philosophy (Ph.D.) Dissertation, Carnegie Mellon University, Sep. 2012.
2. **Nazari, M. H.**, *Minimizing Power Delivery Losses and Maximizing Available Capacity of Electric Power Distribution Networks with Distributed Generators*, Master of Science (M.S.) Thesis, Sharif University of Technology, Aug. 2005.

TEACHING
EXPERIENCE

Instructor

Summer 2019

Capstone Course Two

Developing hybrid on-line course for Hebei Normal University for Nationalities, China

Global Advanced Technology Education (GATE) Co.

Instructor

Spring 2019

EE 458 - *Design of Power System Components*

Department of Electrical Engineering,

California State University, Long Beach

Instructor EE 400D - <i>Senior Capstone Design Project</i> Department of Electrical Engineering, California State University, Long Beach	Spring 2019
Instructor <i>Capstone Course One</i> <i>Developing hybrid on-line course for Hebei Normal University for Nationalities, China</i> Global Advanced Technology Education (GATE) Co.	Summer 2018
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.20 out of 6	Fall 2019
Instructor EE 400D - <i>Senior Capstone Design Project</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.14 out of 6	Spring 2018
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.41 out of 6	Spring 2018
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.36 out of 6	Fall 2017
Instructor EE 400D - <i>Senior Capstone Design Project</i> Department of Electrical Engineering, California State University, Long Beach	Summer School, 2017
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.20 out of 6	Spring 2017
Instructor EE 590 - <i>Power Systems Economics and Applications</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.46 out of 6	Fall 2016
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.18 out of 6	Fall 2016

Instructor EE 400D - <i>Senior Capstone Design Project</i> Department of Electrical Engineering, California State University, Long Beach	Summer School, 2016
Instructor 2016A - <i>Guangdong Power</i> (Short-term training course for power professionals from China) <i>International Training Programs,</i> California State University, Long Beach	Spring 2016
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 5.78 out of 6	Spring 2016
Instructor EE 350 - <i>Energy Conversion Principles</i> Department of Electrical Engineering, California State University, Long Beach Students Evaluation: 6 out of 6	Fall 2015
Teaching Assistant ESD.939 / ESD.951 - <i>Smart Grids and Future Electric Energy Systems</i> Engineering Systems Division, Massachusetts Institute of Technology <i>Students Evaluation: 5 out of 7</i>	Spring 2011
Project Manager EPP 19752 - Project Management: <i>Learning From U.S. Energy Supply Catastrophes</i> Engineering and Public Policy, Carnegie Mellon University	Fall 2010

STUDENT ADVISING	Duc Tran PhD student at CSULB, tentative thesis topic: “Model Predictive Energy Management for Building Microgrids with IoT-based Controllable Loads”, Nov. 2015 - Sep. 2019. Daniel G. Ferreira PhD student at UC Irvine, project topic: “IoT Applications in Building Energy Management”, June 2017 - current. I am co-advising Daniel and his main advisor is at UC Irvine. Abdou Fares M.Sc. student at CSULB, thesis topic: “Two-Area Stability and Control Analysis in RTDS”, Oct. 2015 - May 2016. Hari Krishna M.Sc. student at CSULB, thesis topic: “Zero Net Energy (ZNE) Buildings: Feasibility Study at California State University, Long Beach”, Oct. 2015 - Dec. 2016. Edward Sanchez M.Sc. student at CSULB, thesis topic: “Model Predictive Energy Scheduling for ZNE Building Microgrid”, Jan. 2016 - current. Sanjeev Ramakrishnan M.Sc. student at CSULB, thesis topic: “Power Factor Improvement in Microgrids using Capacitor Banks”, Jan. 2016 - Nov. 2017.
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Saurabh Pandya

M.Sc. student at CSULB, thesis topic: “Smart Building Design: Optimal Placement of Plug-in Load Controllers and Lighting Fixtures in Academic Buildings”, Jan. 2016 - Nov. 2017.

Mevan Fernando

M.Sc. student at CSULB, thesis topic: “Power Quality Improvement using Static VAR Compensators”, Jan. 2016 - Sep. 2017.

Ximena Milla

M.Sc. student at CSULB, thesis topic: “Smart Building Design”, Sep. 2017 - Present.

Sainesh Karan

M.Sc. student at CSULB, thesis topic: “Design IoT Network of Sensors and Actuators across Academic Buildings”, Sep. 2017 - Present.

PROFESSIONAL
SERVICES

Technical Program Committee

IEEE Green Energy and Smart Systems Conference (IGESSC), 2015-2019

Chair of Power Systems Session

IGESSC, Long Beach, CA, 2016-2018

Co-Chair of Power System Fault and Protection Session

49th North American Power Symposium, West Virginia, Morgantown, Sep. 2017

Committee Member at CSULB

Environmental Engineering Department Curriculum Committee, 2017-2019

Graduate Studies Committee, Electrical Engineering Department, 2017-2019

College of Engineering, Grade Appeal Committee, 2018-2019

College of Engineering, Scholarship Committee, 2018-2019

M.Sc./Ph.D. Comprehensive Exam Committee, EE Department, 2015-2019

College of Engineering, Curriculum Committee, 2016-2017

Electrical Engineering Department Chair Nominating Committee, 2016

Undergraduate Studies Committee, Electrical Engineering Department, 2015-2017

Invited Referee for Publications, Journals, and Conferences

IEEE Transactions on Power Systems

IEEE Transactions on Smart Grid

IEEE Transactions on Industrial Informatics

IEEE Transactions on Control of Network Systems

Energies (Open Access Energy Research, Engineering and Policy Journal)

Springer (International Publisher Science, Technology, Medicine)

Energy Conversion and Management Journal

Journal of Power Technologies

IEEE Conference on Decision and Control

American Control Conference

NAPS Symposium

TALKS, SEMINARS & PRESENTATIONS **Invited Talks**

Department of Electrical Engineering and Computer Science, **University of Michigan, Ann Arbor**, Oct. 2019.

Department of Electrical and Computer Engineering, **Wayne State University**, Oct. 2019.

Department of Electrical and Computer Engineering, **Wayne State University**, Apr. 2019.

Department of Electrical and Computer Engineering, **Florida International University**, Mar. 2019.

Workshop on IoT in Smart Buildings, IEEE Green Energy and Smart Systems Conference, California State University, Long Beach, Oct. 2018.

Department of Electrical and Computer Engineering, **Wayne State University**, Apr. 2018.

Department of Systems Engineering and Engineering Management, **UNC Charlotte**, Apr. 2018.

Department of Electrical and Computer Engineering, **Wayne State University**, Nov. 2017.

Luncheon Workshop: IEEE Green Energy and Smart Systems Conference, California State University, Long Beach, Nov. 2017.

Panel Presentation: Resilient Control Systems for Cyber Physical Power and Energy Systems, IEEE PES General Meeting 2017, Chicago, IL, July 2017.

Department of Electrical Engineering, **University of California, Santa Cruz**, Apr. 2017.

Department of Electrical and Computer Engineering, **Kansas State University**, Apr. 2017.

Journal Presentation: IEEE PES General Meeting 2016, Boston, MA, July 2016.

Department of Electrical Engineering, **Columbia University**, May 2016.

Center for Control, Dynamical-Systems, and Computation, **University of California, Santa Barbara**, Jan. 2016.

Department of Electrical Engineering and Computer Science, **University of California, Irvine**, December 2015.

Department of Electrical and Computer Engineering, **University of California Riverside**, Sep. 2015.

Department of Electrical Engineering, **Georgia Southern University**, Apr. 2015.

Department of Electrical Engineering, **California State University, Long Beach**, Mar. 2015.

School of Engineering, **San Francisco State University**, Feb. 2015.

IEEE PES Group, School of Electrical and Computer Engineering, **Georgia Institute of Technology**, Feb. 2015.

Department of Electrical and Computer Engineering, **University of Utah**, Salt Lake City, Mar. 2014.

Semiconductor Research Center Conference, **Carnegie Mellon University**, Oct. 2012.

Pre-Conference Workshop, 8th **Carnegie Mellon Electricity Conference**, Mar. 2012.

Green Islands Workshop, **Massachusetts Institute of Technology**, May 2011.

Department of Electrical and Computer Engineering, University of Porto, Faculty of Engineering, June 2010.

INESC Porto, University of Porto, Faculty of Engineering, Oct. 2009.

101 Power and Energy lecture series, **Carnegie Mellon University**, Apr. 2009.

EPRI Annual Advisory Board meeting, Apr. 2009.

Department of Electrical and Computer Engineering, **Carnegie Mellon University**, Nov. 2008.

Formal Internal Seminars, Presentations & Review Committee Meetings

Technical Advisory Committee, California Energy Commission, Award Number EPC 16-033, Oct. 2018.

Critical Program Review, California Energy Commission, Award Number EPC 16-033, Sep. 2018.

Kick-off Meeting Presentation, California Energy Commission, Award Number EPC 16-033, July. 2017.

Industry Advisory Board meeting, Department of Electrical Engineering, California State University, Long Beach, Nov. 2015.

ARPA-E Quarterly Project Review Meeting, School of ECE, Georgia Tech, Dec. 2014.

ARPA-E Quarterly Project Review Meeting, School of ECE, Georgia Tech, Aug. 2014.

ARPA-E Quarterly Project Review Meeting, School of ECE, Georgia Tech, Apr. 2014.

Advanced Computational Electricity Systems group, School of ECE, Georgia Tech, Jan. 2013.

Electric Energy Systems Group, Department of Electrical & Computer Engineering, Carnegie Mellon, Nov. 2012.

Department of Engineering and Public Policy, Carnegie Mellon, Sep. 2012.

Engineering and Economics of Electric Energy Systems course, Departments of Electrical & Computer Engineering / Engineering & Public Policy, Carnegie Mellon, Mar. 2010.

Engineering and Economics of Electric Energy Systems course, Departments of Electrical & Computer Engineering / Engineering & Public Policy, Carnegie Mellon, Mar. 2009.

EXTRA-
CURRICULAR
ACTIVITIES

Participating in outreach activities, such as CSULB Sustainability Program, and CSULB International Training Programs.

Walking in the Nature, Swimming, and Traveling.