Maria Chierichetti

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Worcester, MA

Employment

| Assistant Professor - San Jose' State University | August 2019 – present |
|--|-------------------------------------|
| Department of Aerospace Engineering | San Jose', CA |
| Part-time Lecturer - San Jose' State University Department of Aerospace Engineering | January – May 2019 San Jose', CA |
| Assistant Professor – Educator - University of Cincinnati | August 2017 – July 2018 |
| Department of Mechanical and Materials Engineering | Cincinnati, OH |
| Visiting Assistant Professor - University of Cincinnati | August 2015 – July 2017 |
| Department of Mechanical and Materials Engineering | Cincinnati, OH |
| Assistant Professor - Worcester Polytechnic Institute | Aug. 2012 – Dec. 2014 |

Education

| Ph.D. in Aerospace Engineering | Jan. 2009 – August 2012 |
|---|-------------------------|
| Georgia Institute of Technology | Atlanta, GA |
| M.S. in Aerospace Engineering | Jan. 2009 – May 2011 |
| Georgia Institute of Technology | Atlanta, GA |
| Laurea Specialistica (M.S.) in Aeronautical Engineering | Sept. 2004 – July 2007 |
| Politecnico di Milano | Milan, Italy |
| Laurea Triennale (B.S.) in Aerospace Engineering | Sept. 2001 – Sept. 2004 |
| Politecnico di Milano | Milan, Italy |

Teaching

San Jose' State University (San Jose', CA)

- AE 112: Aerospace Structural Analysis I; Fall 2019, Fall 2021
- AE 251: Structural vibrations for aerospace applications; Spring 2021; Spring 2022. Graduate class.
- AE 114: Aerospace Structural Analysis II; Spring 2020

Department of Mechanical and Aerospace Engineering

- AE 180-05: Individual Studies. Workshop to support student success in AE 112; Fall 2019

AE 250: Advanced Aerospace Structures and Materials; Spring 2020 & Spring 2019. Graduate class in advanced aerospace structures focusing on composite design. Introduced new topic on "Introduction to Aeroelasticity"

University of Cincinnati (Cincinnati, OH)

- Experimental methods in Mech. Eng. Structural motion MECH 5072C (multiple sections);
 Fall 2015 & Fall 2016 & Fall 2017. Required laboratory class for seniors in mechanical engineering. Designed new experiment and improved three lab sessions based on available equipment.
- Acoustics MECH 6066/5166; Fall 2015 & Fall 2016 & Fall 2017. Elective first year graduate class. Re-designed class to include lab session in anechoic chamber (with support of National Institute of Noise Control) and reviews of numerical methods.
- Statics and Particle Dynamics MECH 2020 (two sections); Spring 2016 & Spring 2017.
- Statics MET 1071; Spring 2016 & Spring 2017.

Worcester Polytechnic Institute (Worcester, MA)

- Structural Dynamics ME-4712; Spring 2014. Designed new required class for senior aerospace engineers to satisfy ABET recommendations.
- Aeroelasticity ME-593; Spring 2013 & Fall 2014. Designed new elective graduate class for introduction of new MS and PhD program in Aerospace Engineering.
- Aircraft Dynamics and Control ME-4723; Fall 2012. Re-designed based on ABET requirements

MS thesis/project advisor at SJSU

- 1. S. Tafolla. Expected graduation: Spring 2022.
- 2. E. Nabiswa. Structural Health Monitoring of Composite Structures using Guided waves. Expected graduation: Spring 2022.
- 3. N. Grigoryan, Machine Learning for Modeling Aerospace Vibrations, expected graduation Fall 2021.
- 4. R. Lee. An Aero Structural Study and Optimization of Modern Truss Braced Wings, expected graduation: Fall 2021.
- 5. Yu Ting. PID Controller for Blowdown Supersonic Wind Tunnel. Graduated Fall 2021.
- 6. R. Sharma. Vibration Experiments Design for SJSU AE Department. Graduated in Fall 2021.
- 7. D. Francisco. Design and implementation of a lunar-sourced sustainable habitat for further manned space exploration. Graduated in Fall 2021.
- 8. M. Baltz. Use of depth imaging for non-destructive testing of aircraft. Graduated in Fall 2021.
- 9. C. Berger. Finite element analysis of a mock satellite based on launch vehicle requirements. Graduated in Fall 2021.
- 10. S. Kalush, Resolving Multi-Aircraft Conflicts in an Urban Air Mobility Environment, graduated in Fall 2020.
- 11. M. Gallelo. Feasibility and Design of 3d Printing Manufacturer CubeSat, graduated in Fall 2020.

MS thesis committee member

- K. Stewart, Nuclear Thermal Rocket Engine with a Toroidal Aerospike Nozzle, Fall 2020.

Honors and Awards

- Research Associate for the Mineta Transportation Institute, SJSU, July 2020 present
- Guidry Teaching Fellow, Competency Based Learning in AE112, M. Chierichetti, College of Engineering, SJSU, 2020.
- Amelia Earhart Fellowship by Zonta International (2010 2011 & 2011 2012)
- American Helicopter Society national Lichten Competition, 1st place Southern Region, 2011

Research Funded projects

- A Machine Learning Approach for Stress Prediction in Autonomous Systems, PIs: M. Chierichetti, F. Davoudi; Small Group Initiation Grant (SJSU College of Engineering), January 2020-December 2020, Jan. 2021 Dec. 2021, \$100,000.
- Analyzing the relationship between mandatory helmet use regulations and adult cyclists' behavior in California, PIs: F. Davoudi, M. Chierichetti; CSU Transportation Institute, May 15, 2020 July 31, 2021, \$74,858.

Professional Development

- Fundamentals of Program Assessment Workshop, organized by ABET (Engineering accreditation agency for higher education programs), virtual, October 2021.
- *SJSU Online Teaching Certificate*, organized by SJSU, Summer 2020.
- University Grant Academy, organized by SJSU, Spring 2020.
- Short Course on Electric VTOL Technology, organized by VFS Society, San Jose, January 2020.
- Engineering Community of Practice, organized by COE at SJSU, Fall 2019
- Teaching and Learning Engineering: a Tango, organized by Prof. N. Mourtos at SJSU, February, 2019
- Lighting Lessons in the Active Learning Classroom Course Design Institute, organized by CETL at the University of Cincinnati, May, 2017
- Echo360 ALP training session, organized by CETL at the University of Cincinnati, April, 2017
- Basic Kaltura Video Creation, organized by CETL at the University of Cincinnati, February, 2017

Leadership in Faculty Development Activities

Faculty mentor

KIND Speed Mentoring Session

April 2022

Chierichetti, M.

| Faculty teaching mentor | September, 2021 — |
|---|-----------------------|
| Mentor in the inaugural College of Engineering Teaching Mentor | Present |
| program. Training: Fall 2021; Mentorship: Spring 2022 | San Jose, CA |
| Invited panelist in career advice seminar for post-docs | Nov. 15, 2021 |
| Title: "Postdoc Job Search Seminar Series" organized by the | Virtual event |
| Michigan Postdoctoral Association of the College of Engineering | |
| Invited presenter in faculty conversation series | Oct. 22, 2021 |
| Title: "Implementing specifications grading (an alternative grading | San Jose, CA |
| system) to enhance student learning" | |
| Invited panelist in new faculty workshop | Oct. 6, 2021 |
| Panel discussion on inclusive pedagogies in in-person and online | San Jose, CA |
| classes | |
| Peer Coach in TEA project | Spring 2021 — Present |
| Peer coach and faculty mentor to support implementation of | San Jose, CA |
| specification grading at SJSU | |
| Invited Seminar in "Faculty Conversation" series – College of | April, 23 2021 |
| Engineering | San Jose, CA |
| Title: "Implementation of mastery learning pedagogies in an upper | |
| division engineering class" | |
| Invited Workshop for College of Engineering | Jan., 15 2021 |
| Title: "Building a learning community in remote classrooms" | San Jose, CA |

Consulting Activities

Independent Contractor for ATA-Enginneering, Inc.July 2017 — Dec. 2017Support activities for Phase I STTR project; Navy topic N17A-T009Cincinnati, OH

Peer reviewed technical reports

 F. Davoudi, <u>M. Chierichetti.</u> Exploring the Relationship Between Mandatory Helmet Use Regulations and Adult Cyclists' Behavior in California Using Hybrid Machine Learning Models, MTI, 2021, <u>https://transweb.sjsu.edu/research/2024-Bike-Helmet-Regs-Public-Opinion</u>.

Book chapters

- 1. P. A. Backer, <u>M. Chierichetti</u>. *Stress and trauma during the COVID-19 pandemic in engineering students at a minority serving institution*, In "Research on Stress in Education: Implications for the COVID-19 Pandemic and Beyond", edited by C. McCarthy and R. Lambert, IAP, in preparation.
- N. Mourtos, Parinaz Zartoshty, <u>M. Chierichetti</u>. Developing students as global citizens: using culturally responsive teaching and engineering design to develop a global ethos on campus, in "Trends, Internationalization and Regional developments in Higher Education", edited by A. Patil, Springer Book, invited, in preparation.

Journal Publications

- 1. P. A. Backer, <u>M. Chierichetti</u>. *Exploring the Impact of the COVID-19 Pandemic on the Lives of Engineering Students at a large Public University*. Submitted to the International Journal of Engineering Education, February 2021. Accepted with revisions.
- <u>M. Chierichetti,</u> P. A. Backer. Exploring Faculty Perspectives during Emergency Remote Teaching in Engineering at a Large Public University. Education Sciences, 2021, 11(8), 419; https://doi.org/10.3390/educsci11080419.
- 3. P. Vurtur Badarinath, <u>M. Chierichetti</u>, F. Davoudi. A Machine Learning Approach as Surrogate of Finite Element Analysis in Autonomous Systems, Sensors, 2021, 21(5), 1654; https://doi.org/10.3390/s21051654.
- 4. <u>M. Chierichetti</u>, M. Demetriou. *Moving sensors for improved estimation of dynamic structures*. Journal of Vibration and Control, Vol. 27, Issue 23-24, pp. 2701–2710, 2021, https://doi.org/10.1177/1077546320965014.
- 5. V. Rahneshin, <u>M. Chierichetti</u>. *An integrated approach for non-periodic dynamic response prediction of complex structures: Numerical and experimental analysis*. Journal of Sound and Vibration, 378, 38:55, 2016.
- 6. <u>M. Chierichetti</u>, C. McColl, M. Ruzzene. *Prediction of UH-60A blade loads: an insight on Load Confluence Algorithm*. AIAA Journal, 52(9), 2007:2018, 2014.
- 7. <u>M. Chierichetti</u>, C. Grappasonni, G. Coppotelli and C. McColl. *A modal approach for dynamic response monitoring from experimental data*. Mechanical Systems and Signal Processing, 48, 199:217, 2014.
- 8. <u>M. Chierichetti</u>. Load and Response Identification for a non-linear flexible structure subject to harmonic loads. Journal of Computational and Nonlinear Dynamics. Special issue on Flexible Multibody Dynamics, 9(1), 011009, 2014.
- 9. <u>M. Chierichetti</u>, M. Ruzzene. *Dynamic displacement field reconstruction through a limited set of point measurements: application to plates*. Journal of Sound and Vibration, 331(21), 4713:4728, 2012.
- 10. <u>M. Chierichetti</u>, C. McColl, D. Palmer, M. Ruzzene, O. Bauchau. *Combined analytical and experimental approaches to rotorcomponents stress predictions*. Proceedings of the Institution of Mechanical Engineers, Part K, Journal of Multibody Dynamics, 225, 322:330, 2011, invited paper.
- 11. <u>M. Chierichetti</u>, M. Ruzzene. *Model updating in structural dynamics through a confluence algorithm.* Journal of Theoretical and Applied Mechanics, 49(3), 2011.
- 12. M. Morandini, <u>M. Chierichetti</u>, P. Mantegazza. *Characteristic behavior of prismatic anisotropic beam via generalized eigenvectors*. Journal of Solids and Structures, 47, 1327:1337, 2010.

Professional presentations/conference proceedings

 R. Aravamudhan, <u>M.</u> Chierichetti. Analysis of barriers to graduation for transfer students in Aerospace Engineering, Submitted, ASEE IV regional conference, Vancouver, Canada, May 12-14, 2022

- 2. <u>M. Chierichetti</u>. Supporting aerospace engineering students during and after the Covid-19 pandemic to develop a diverse and well-rounded future workforce, Accepted, Technical paper, 2022 AIAA SciTech Forum, 3-7 January 2022, San Diego.
- 3. <u>M. Chierichetti</u>, F. Davoudi, P.K. Rao Sampelly, P. Kalmalkar. *Optimal sensor location along a beam using machine learning*, Accepted, Technical paper, 2022 AIAA SciTech Forum, 3-7 January 2022, San Diego.
- S. Choppala, P. Vurtur Badarinath, <u>M. Chierichetti</u>, F. Davoudi. Applications of Surrogate Finite Element Machine Learning approach for Structural Monitoring. Accepted. International Workshop for Structural Health Monitoring, IWSHM 2022, Palo Alto CA.
- 5. <u>M. Chierichetti</u>, P. A. Backer. *Student Experiences after the move to fully online instruction: A case study of one large public institution*. Frontier in Education (FIE), Lincoln, Nebraska, October 13-16, 2021.
- K. Auer, P. Vurtur Badarinath, F. Davoudi Kakhki, <u>M. Chierichetti</u>. *Statistical analysis of adult cyclists' sociodemographic factors and helmet-wearing behavior*. 12th International Conference on Applied Human Factors and Ergonomics (AHFE 2021), New York, July 25-29, 2021.
- 7. S. Kalush, <u>M. Chierichetti.</u> *Resolving Multi-Aircraft Conflicts in an Urban Air Mobility Environment*. AIAA Aviation Forum, Washington D.C., August 2021, virtual event.
- 8. <u>M. Chierichetti,</u> N. Grigoryan, R. Aravamudhan, J. Rodriguez. *Competency based learning in "Aerospace Structures I" in an online environment work in progress.* ASEE Annual Conference & Exposition, July 2021, Long Beach, CA, virtual event.
- 9. P. A. Backer, L. Sullivan-Green, <u>M. Chierichetti</u>. *The effects of COVID 19 on faculty in the College of Engineering at San Jose' State University*. ASEE Annual Conference & Exposition, July 2021, Long Beach, CA, virtual event.
- 10. <u>M. Chierichetti,</u> P. A. Backer, L. Sullivan-Green, L. Rosenfeld. *Learning from the voices of faculty: An analysis of the impact of the shelter-in-place on faculty at SJSU University in Spring 2020*, Accepted, ASEE Annual Conference & Exposition, July 2021, Long Beach, CA, virtual event.
- 11. P. A. Backer, <u>M. Chierichetti</u>, L. Sullivan-Green, L. Rosenfeld. *Learning from the student experience: Impact of the shelter-in-place on the learning experiences of engineering students at SJSU*, ASEE Annual Conference & Exposition, July 2021, Long Beach, CA, virtual event..
- 12. E. Pippin, <u>M. Chierichetti</u>. Service Learning in Aerospace Engineering: How Outreach Activities Are Incorporated in Upper Division Curriculum, Technical paper, 2021 AIAA SciTech Forum, 11-15 January 2021, virtual event.
- 13. <u>M. Chierichetti</u>, F. Davoudi, D. Huang, P. Vurtur Badarinath, M. Linzmeyer. *Surrogated finite element models using machine learning*, 2021 AIAA SciTech Forum, 11-15 January 2021, virtual event.
- 14. <u>M. Chierichetti</u>, Understanding the role that non-academic factors play on aerospace engineering students' learning during the COVID-19 pandemic, WEEF-GEDC 2020, 15-20 November, 2020, virtual event.
- 15. L. Rosenfeld, P. A. Backer, L. Sullivan-Green, <u>M. Chierichetti</u>. *Exploring the Impact of a Pandemic on the Lives of Engineering Students*. 2020 AAC&U & PKAL STEM Conference, November 5-7, 2020, virtual event.
- E. Murcio, <u>M. Chierichetti</u>. Image Processing techniques for crack detection in Aerospace Structures, 4th Annual International Conference on Mechanical Engineering, 20-23 July 2020, Athens, Greece, virtual event

- 17. S. Subramanian, <u>M. Chierichetti</u>. *Risk analysis and challenges of Using on-demand Air Taxis operations for Large-Scale Urban Air Mobility*, 4th Annual International Conference on Mechanical Engineering, 20-23 July 2020, Athens, Greece, virtual event
- M. Chierichetti, F. Davoudi. A Combined Machine Learning and Finite Element Approach for Structural Monitoring, 10th European Workshop on Structural Health Monitoring (EWSHM 2020), Palermo, Italy, July 2020 – canceled due to COVID-19
- M. Chierichetti, M. Demetriou. Moving Sensor State Estimators with application to Structural Monitoring, 10th European Workshop on Structural Health Monitoring (EWSHM 2020), Palermo, Italy, July 2020 – canceled due to COVID-19
- 20. <u>M. Chierichetti</u>, M. Demetriou. *Moving sensors in structural dynamics*. SPIE Smart Structures + Nondestructive Evaluation 2020, Anaheim, CA, April 2020, virtual event
- 21. <u>M. Chierichetti</u>, V. Rahneshin. *Efficient response monitoring of flexible structures*. ASME SMASIS 2014, Newport, RI, September 8-10, 2014.
- 22. <u>M. Chierichetti</u>, V. Rahneshin. *An FFT-based approach for dynamic response prediction of non-periodic systems*. SPIE Smart Structures/NDE 2014, San Diego, CA, USA, March 9-13, 2014.
- M. Chierichetti, C. Grappasonni. Experimental full-field response identification with limited set of operational data, 50th Annual Technical Meeting of the Society of Engineering Science, Providence, RI, USA, July 28-31, 2013.
- 24. <u>M. Chierichetti</u>, C. Grappasonni, G. Coppotelli, M. Ruzzene, *A modal approach for dynamic response monitoring from experimental data*, AIAA SDM 2013, Boston MA, April 8-11, 2013.
- 25. C. Grappasonni, <u>M. Chierichetti</u>, G. Coppotelli, M. Ruzzene. *Using OMA for Full-Field Dynamic Response Identification*. IOMAC'13, 5th International Operational Modal Analysis Conference, Guimares Portugal, May 13-15 2013.
- 26. <u>M. Chierichetti</u>, *Self-updating numerical models for Structural Health Monitoring*, NEW.MECH 2012, Brown University, Providence, Nov. 3, 2012.
- 27. <u>M. Chierichetti</u>, M. Ruzzene. *Calibration of dynamic models based on experimental measurements in a rotating environment*. 49th Annual Technical Meeting of the Society of Engineering Science, Atlanta, GA, USA, October 10-12, 2012.
- 28. <u>M. Chierichetti</u>, M. Ruzzene. *Model updating in structural dynamics through a confluence algorithm*. 53rd AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, Honolulu, USA, 23-26 April 2012.
- M. Chierichetti, D. Palmer, M. Ruzzene, C. McColl, O. Bauchau. Prediction of UH-60 blade loads: an insight on confluence algorithm to correct internally generated airloads. In Proceedings of the American Helicopter Society 67th Annual Forum, Virginia Beach, USA, 3-5 May 2011
- 30. <u>M. Chierichetti</u>. *Model updating in structural dynamics through a confluence approach*. AHS Lichten Competition, Georgia Institute of Technology, Atlanta, USA, 3 February 2011
- C. McColl, D. Palmer, <u>M. Chierichetti</u>, O. Bauchau, M. Ruzzene. *Comprehensive UH-60 loads model validation*. In Proceedings of the American Helicopter Society 66th Annual Forum, Phoenix, USA, 11-13 May 2010
- M. Chierichetti, C. McColl, D. Palmer, M. Ruzzene, O. Bauchau. Combined analytical and experimental approaches to rotor components stress predictions. In Proceedings of the First Joint International Conference on Multibody System Dynamics, Lappeenranta, Finland, 25-27 May 2010

- 33. M. Chierichetti, M. Ruzzene. Response prediction in dynamic systems from experimental measurements. AIAA Region II Student Conference, Destin, USA, 8-9 April 2010
- 34. M. Chierichetti, N. Margiotta, G. Sala and E. Wilczek. Structural design of a seaplane float made of composite material. 4th Pegasus AIAA Student conference, Prague, 23-25 April 2008.

Invited talks

- 1. A novel approach for dynamic response monitoring, March 8, 2013, Mechanical Engineering, Clarkson University, Postdam, NY.
- 2. Definition and validation of response monitoring approaches in the frequency domain, Feb. 1, 2013, North Eastern University, Boston, MA.
- 3. A novel approach for dynamic response monitoring, Mechanical Engineering graduate seminar, WPI, Worcester, MA, 2012.
- 4. A combined numerical and experimental approach for stress prediction in rotating components, March 20, 2012, WPI, Worcester, MA.

Outreach activities to promote diversity in engineering

Learning aerospace structures Third street community center & Campbell Union School District Sound & Vibrations! Tech Girls program, WPI Worcester Polytechnic Institute **Teaching Fellow** Georgia Institute of Technology

Service Learning in AE 112, SJSU Fall 2019

> Worcester, MA May 2011 - May 2012 Atlanta, GA

Service to profession

| Activity | Nature and Dates of service | Notes |
|----------------------------|------------------------------|--------------------------------|
| AIAA Education Outreach | Member (Fall 2021 – present) | Disciplinary technical society |
| Subcommittee (Structural | | (AIAA: American Institute |
| Dynamics technical | | for Aeronautics and |
| committee) | | Astronautics) |
| AIAA Structural Dynamics | Member (Summer 2021 – | Disciplinary technical society |
| technical committee | present) | (AIAA: American Institute |
| | | for Aeronautics and |
| | | Astronautics) |
| ASEE PSW (Pacific South | Organizing committee (Fall | Abstract and paper reviews |
| West region) conference | 2020 – Spring 2021) | |
| 2021 | | |
| ASEE PSW (Pacific South | Member (Fall 2020 – Spring | Reviewed undergraduate and |
| West region) student award | 2021) | graduate students applications |
| committee | | and nominated awardees |

| ASEE PSW (Pacific South | Director (Fall 2020 – present) | |
|-------------------------------|--------------------------------|--------------------------------|
| West region) board | | |
| Journal "Vibrations" | Topic Board (2020 – 2021) | |
| 50 th SES/ASME AMD | Symposium organizer (2013) | Title of Symposium: |
| technical meeting, July 28- | | "Characterization and |
| 31, 2013, Brown University, | | Imaging of Structural and |
| Providence, RI | | Material Imperfections" |
| SES 2012 conference | Session chair (2012) | |
| AIAA SDM conference | Session chair (2013) | (AIAA: American Institute |
| | | for Aeronautics and |
| | | Astronautics) |
| AIAA Structures technical | Associate Member (Summer | Disciplinary technical society |
| committee | 2013 – Fall 2014) | (AIAA: American Institute |
| | | for Aeronautics and |
| | | Astronautics) |
| ASME NDE technical | Associate Member (Summer | Disciplinary technical society |
| committee | 2013 – Fall 2014) | |

- Peer-reviewer (Jan. 2009 Present)
 - External reviewer for proposals submitted to: NASA MITTIC, NSF GFRP, NSF CMMI, ARISTEIA II.
 - Journals: Archives of Applied Mechanics, IOP Conference Series: Earth and Environmental Science, Smart Materials and Structures, Journal of Sound and Vibration, Journal of Vibration and Control, Journal of Applied Mechanics, Journal of Vibrations and Acoustics, Recent patents in Mechanical Engineering, Mechanics Research Communications, The Aeronautical Journal, Journal of Aerospace Engineering, Journal of Mechanical Engineering, Optics and Lasers in Engineering, Journal of Sandwich Structures and Materials, Vibrations.
 - Conferences: Frontiers in Engineering Education 2021, ASEE PSW conference 2021, ASEE Annual Forum 2021, WEEF & GEDC 2020, ASME IMECE 2014, ASME IDETC/CIE 2013, ASME IMECE 2013, AIAA SDM 2013, ASME IMECE 2011.

| Activity | Nature and Dates of service | Level |
|--------------------------|------------------------------|------------------------|
| SJSU Research Life Cycle | Member (Jan 2022-Dec. | University |
| Subcommittee | 2022) | |
| COE Graduate Curriculum | Member (Fall 2021) | College of Engineering |
| Committee | | |
| COE Assessment Committee | Member (Fall 2021) | College of Engineering |
| Associate Chair | Summer 2021 – present | Department |
| Assessment coordinator | Summer 2021 – present | Department |
| AE Curriculum Committee | Chair (Fall 2021 – present) | Department |
| | Member (Fall 2019 – present) | |

Service to Department and University

| Department Chair review | Member (Spring 2020) | Department |
|--------------------------|------------------------------|------------------------|
| committee | | |
| AE Assessment Committee | Member (Fall 2019 – present) | Department |
| COE research committee | Member (Fall 2019 – Spring | College of Engineering |
| | 2020 – Spring 2021) | |
| Faculty Search Committee | Member (Fall 2019 – Spring | Department |
| | 2020) | |
| Aerospace Engineering | Member (Fall 2012 - Fall | Department – WPI |
| undergraduate committee | 2014) | |
| MS thesis committee | Member (2013) | Department – WPI |
| Aerospace degree audits | Member (2013 – 2014) | Department – WPI |
| Faculty Search Committee | Member (Fall 2013 – Spring | Department – WPI |
| | 2014) | |

- Course coordinator for AE 112 AE114 AE250 AE251 for aerospace engineering program, SJSU. Fall 2019-present.
- Outcome champion "Team skills" for aerospace engineering program, SJSU. Fall 2019-Spring 2020.
- Participated in Aerospace Engineering program external review, Fall 2019.
- Participated in ABET program review, 2017, University of Cincinnati.
- Participated in graduate program review, 2017, University of Cincinnati.
- Participated in ABET program review, 2014, WPI.
- Contributed to planning and establishing of Aerospace Engineering graduate program, 2012-2014, WPI.

Service to students and the community

- Session chair for "Silicon Valley Women in Engineering Conference," session "Innovative Transportation", March 2021, SJSU.
- Session chair for "Silicon Valley Women in Engineering Conference," session "Sustainable Transportation", March 2020, SJSU.
- Organized service learning activities in after school programs at Monroe Middle School and at Third Street Community Center, 2019, San Jose'.
- Volunteer as judge in the "Silicon Valley Innovation Challenge," 2019, SJSU.
- Volunteer as judge in "GRAD 2013: The Innovation Exchange," WPI.
- Volunteer to participate in "Witson" Online Mentoring program.
- Volunteer as judge at MassAcademy, WPI, May 2013.
- Volunteer to be an instructor of the WPI Tech Girl program, Spring 2014.