

1.7 – Curriculum Vitae

1.7 CURRICULUM VITAE

The attached curriculum vitae includes a comprehensive list of the following:

- 1. Educational Background**
- 2. Professional Affiliations**
- 3. Awards and Honors**
- 4. Teaching and Research Interest**
- 5. Academic Appointments**
- 6. Teaching-Courses Taught- Graduate Student Advisee**
- 7. Research- Funded Research**
- 8. Publications & Presentations**
- 9. Service**
- 10. Industry Experience**
- 11. Other Experience and Skills**



Shideh Shadravan

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EDUCATION

- | | |
|---------------------------------------|---|
| Ph.D. Civil Engineering (2011) | Major: Structures
University of Oklahoma-Norman, Oklahoma, USA
Dissertation: “Dimensional Stability of Concrete Slabs on Grade” |
| M.S. Civil Engineering (2007) | Major: Structures
University of Oklahoma-Norman, Oklahoma, USA
Thesis: “Bending Capacity of Cold Formed Z-Purlins Supporting a Standing Seam Roof System with Torsional Bracing” |
| B.S. Civil Engineering (1990) | Major: Structures
University of Ferdosi-Mashad, Mashad, Iran |

PROFESSIONAL AFFILIATIONS

- Engineering Intern (E.I.) Oklahoma Board Certification Number 15288
- Technical Committee Member of International Conference on Civil Engineering and Architecture (ICCEA) 2019
- Liaison of Building Technology Educators’ Society, Inc. (BTES)
- Associate Member A.M. ASCE, Elected by Action of the Board of Direction-ASCE
- Member of Structural Engineering Institute (ASCE/SEI-ASCE)
- Member of Engineering without Borders (ASCE/EWB-ASCE)
- Member of Architectural Engineering Institute (ASCE/AEI-ASCE)
- Member of Construction Institute (ASCE/CI-ASCE)
- Member of American Institute of Steel Construction (AISC)
- Member of American Society for Engineering Education (ASEE)
- Member of American Standard Test Method (ASTM)



AWARDS and HONORS

- 2019 Awarded, “Division of Architecture Publication Incentive Program Award “
- 2019 Nominated, Gibbs College of Architecture: “Norma Campus VPR Research Award for Scholarly Engagement with the Private Sector”
- 2018 Awarded, Gibbs College of Architecture: “Outstanding Faculty Award”, Contributions to the College Through the Teaching, Research, Service and Collegiality.
- 2019 Awarded Grant: APA-Engineered Wood Association
- 2018 Awarded Grant: Edward Rice, CTS, Cement Manufacturing Cor.
- 2017 Awarded Grant: APA-Engineered Wood Association
- 2017 Awarded Grant: Insurance Institute for Business & Home Safety (IBHS)
- 2016 Awarded Grant: Insurance Institute for Business & Home Safety (IBHS)
- 2012 “CTS Cement Manufacturing Fellowship”, Advanced Concrete Research-Post Doc.
- 2011 “CTS Cement Manufacturing Fellowship”, Advanced Concrete Research-Post Doc.
- 2010 “CTS Cement Manufacturing Fellowship”, Advanced Concrete Research
- 2006 Awarded “Heritage Scholarship Award Recipient”, University of Oklahoma
- 2005 Awarded “Heritage Scholarship Award Recipient”, University of Oklahoma
- 2005-2011 “Graduate Research Fellowship”, Civil Engineering and Environmental Science
- 2004 Awarded “Oklahoma Farsi School Outstanding Teacher Award”

TEACHING and RESEARCH INTEREST

Teaching Interest:

- Structural Design: Steel, Concrete, Wood, and Composite Materials
- Architectural Structures
- Construction of Structures
- Statics and Strength of Materials
- Research Methods

Research Interest:

- Building Resilience in Tornados, Hurricanes, and Seismic
- Cost-Effective Methods to Improve Residential Wood-Frame Construction and Foundation
- Structures’ Failure Modes
- Materials/ Innovative Materials: Structural, Architectural, Constructional, and Acoustical
- Architectural and Historic Building, Sustainability and Structure Resilience During the Years
- Racking Installation with Stability for the Solar System
- Educational: Effective Technics to Teach Structures to Architecture and Construction Science Students Effectively



ACADEMIC APPOINTMENTS

- Assistant Professor,* August 2014- Present
University of Oklahoma – Norman, Oklahoma
Gibbs College of Architecture (GCA)
Division of Architecture
- Lecturer,* August 2011- August 2013
Cornell University – Ithaca, New York
Civil and Environmental Engineering
- Advised
Architecture Students,* August 2011- August 2013
Cornell University – Ithaca, New York
College of Architecture, Art, and Planning.
- Post-Doctorate,* June 2012– August 2012
University of Oklahoma– Norman, Oklahoma
Civil Engineering and Environmental Science (CEES)
Research: Dimensional Stability of Type K Concrete Slabs- on- Ground
- Post-Doctorate,* August 2011 – October 2011
University of Oklahoma– Norman, Oklahoma
Civil Engineering and Environmental Science
Research: Stability of Concrete Slabs on Grade Considering Shrinkage,
Moisture, Gradient, and Porosity
- Adjunct Instructor,* August 2009, August 2010
University of Oklahoma – Norman, Oklahoma
Civil Engineering and Environmental Science
- Teaching Assistant,* August 2009- December 2009
University of Oklahoma– Norman, Oklahoma
Civil Engineering and Environmental Science
- Graduate
Research Assistant,* August 2005- August 2011
University of Oklahoma– Norman, Oklahoma
Civil Engineering and Environmental Science



TEACHING

Course Taught

Influenced 700 + Students (Undergraduates and Graduates)

At University of Oklahoma-Gibbs College of Architecture (2014-Present):

- ARCH 4133/5133: Architectural Structures I (3 Credit Hours)
- ARCH 4233/5233: Architectural Structures II (3 Credit Hours)
- ARCH 4333/5333: Advanced Structures (3 Credit Hours)
- ARCH 4193/5193: Architectural Structures I (3 Credit Hours)
- ARCH 6990: Special Studies (3 Credit Hours)
- PDC 6023: Advanced Research Methods
in Planning, Design and Construction (3 Credit Hours) - (Co-Instructor)
- CNS 3223: Structures I (3 Credit Hours)
- CNS 4223: Structures II (3 Credit Hours)
- CNS 4113: Structures II (3 Credit Hours)
- CNS 4193: Architectural Structures I (3 Credit Hours)
- Collaborated with Design Studio Courses

Previous Courses Taught:

At Cornell University (2011-2013):

- CEES 5010/5020: Graduate Project-Capstone (6 Credit Hours/ Year)
- ARCH: Collaborated with Department of Architecture
 - Architecture Students Design Studio
- Advised Architecture Students in Sustainability Research Facility Project Located in New York City, New York- Cornell University Sustainable Design Organization

At University of Oklahoma (CEES) - (2009-2010)

- CEES 3663: Structural Design- Steel I (3 Credit Hours)
- CEES 5773: Structural Design-Steel II (3 Credit Hours)
- CEES 3414: Structural Analysis-Teacher Assistant (3 Credit Hours)



Graduate Committees Served (University, College, Department)

Ph.D. Dissertation Committee Member: Committee Member 2, Chair 2

- Advisee: Jonathan T. Drury

To University of Oklahoma: College of Engineering, Civil Engineering and Environmental Science (CEES).

Dissertation: “Shear Performance of Non-Traditional Concrete.”

Graduated: August 2018

- Advisee: Trevor J. Looney

To University of Oklahoma: College of Engineering, Civil Engineering and Environmental Science (CEES).

Dissertation: “Plain Reactive Powder Concrete Mix Proportion Optimization for Enhanced Rheological and Mechanical Properties Using Local Materials.”

Expected Graduation: May 2021

- Chair (One Semester): Mahdi Afkhamiagha

To Department: Gibbs College of Architecture, Division of Architecture.

Transferred: to Purdue University

- Chair (One Semester): Sogol Salary

To Department: Gibbs College of Architecture, Division of Architecture.

Changed Major: to Construction Science, Gibbs College of Architecture

Master’s Thesis Committee Chair: Department of Construction Science (1 Student)

- Reajina Singh Maharjan. (August 2018- Present)

To College: Gibbs College of Architecture, The Haskell & Irene Lemon Construction Science

Thesis: “Improved Design Practices for Future Tornado-Resilient Homes.”

Master’s Thesis Committee Member: Division of Architecture (3 Students),

To Department: Division of Architecture

- Advisee: Yetunde Obasade, Graduated Dec. 2018

Thesis: “A Wind Analysis on the Fractal Architecture of the Bavinger House.”

- Advisee: Tayana Ghosh, Graduated Dec.2018

Thesis: “Developing a Composite Mycelium-Glass Brick Unit.”

- Advisee: Mahdi Afkhamiagha, Graduated May 2017

Thesis: “Design Oriented Computational Fluid Dynamics; Early Design Optimization for Architects.”



Master's Non-Thesis Committee Member: Division of Architecture (22 Students), *To Department*

- Advisee: Anne Arts (May 2019)
- Advisee: Evan Sack (May 2019)
- Advisee: Aida Mazroi (May 2019)
- Advisee: Chance Williams (May 2019)
- Advisee: Behrooz Dehghan Parchini (May 2019)
- Advisee: Farzan Mahmaudzadeh (May 2019)
- Advisee: Shiri Shubbar (May 2018)
- Advisee: Amanda Edwards (May 2018)
- Advisee: Arianna Hawkins (May 2018)
- Advisee: BreAnn Goshe (May 2018)
- Advisee: Prusso, Canyon. (May 2018)
- Advisee: Kleypas, Daniel. (May 2018)
- Advisee: Rice, Daniel. (May 2018)
- Advisee: Gardner, Kristin. (May 2018)
- Advisee: Trout, Lindsey. (May 2018)
- Advisee: McDow, Lorena. (May 2018)
- Advisee: Ferdosi Babil Oliaei, Nima. (May 2018)
- Advisee: Varadarajan, Snehalakshmi. (May 2018)
- Advisee: Rangie, Soha. (May 2018)
- Advisee: Dhanaveerapandian, Suchithra. (May 2018)
- Advisee: Seyed-Hosseini, Nazanin. (May 2015)
- Advisee: Motaghi Pisheh, Farzad. (May 2015)

Invited by Graduate Students: Division of Architecture (2 Students)

- Advisee: Jamie Leake. (May 2019)
- Advisee: Hays Emily. (May 2019)

RESEARCH

Media: <https://www.youtube.com/watch?v=XEWy3gdSAkE&feature=youtu.be>

Funded Research and Contributions (2014-2019) - Total \$216,847.74

\$155,000.00 External and \$61,847.74 Internal

External Funding – Awarded \$155,000.00

- “APA Flexible Sheathing Shearwall Tests”
P.I.: **Shideh Shadravan**, OU
Co-P.I.: Chris Ramseyer, OU
Sponsor: APA-The Engineered Wood Association
Amount: \$15,000.00
Duration: 06/17/2019 to 12/31/2019



- “Improved Residential Foundations Using Chemically PreStressing Concrete”
P.I.: **Shideh Shadravan, OU**
Co-P.I.: Chris Ramseyer, OU
Sponsor: CTS-Cement Manufacturing Corporation, Edward K. Rice
Amount: \$50,000.00
Duration: 03/12/2018 to 12/31/2019
- “Structural Sheathing Test Program”
P.I.: **Shideh Shadravan, OU**
Co-P.I.: Chris Ramseyer, OU
Sponsor: APA-The Engineered Wood Association
Amount: \$18,000.00
Duration: 11/01/2017 to 12/31/2017
- “Investigation of Anchor Forces on Residential Wall Systems Due to Tornado Events”
P.I.: **Shideh Shadravan, OU**
Co-P.I.: Chris Ramseyer, OU
Sponsor: Insurance Institute for Business & Home Safety (IBHS)
Amount: \$9,000.00
Duration: 07/01/2017 to 12/31/2017
- “Investigation of Anchor Forces on Residential Wall Systems Due to Tornado Events”
P.I.: **Shideh Shadravan, OU**
Co-P.I.: Chris Ramseyer, OU
Sponsor: Insurance Institute for Business & Home Safety
Amount: \$50,000.00
Duration: 07/01/2016 to 06/30/2017
- Donated Sheathings for Wood Shear Walls Testing
P.I.: **Shideh Shadravan, OU**
Sponsor: APA-The Engineered Wood Association
Amount: Approximately \$4,000.00
Duration: Two times donations in 2017 & 2019
- Donated Materials for Wood Shear Walls Testing
P.I.: **Shideh Shadravan, OU**
Sponsor: Home Creations
Amount: Approximately \$6,000.00
Duration: Two times donations in 2016 & 2017
- Donated Equipment and Tools for Wood Shear Walls Testing
P.I.: **Shideh Shadravan, OU**
Sponsor: Dr. Tim Reinhold, IBHS Sr. VP, Chief Engineer
Amount: Approximately \$3,000.00
Duration: 2016



**Provided Significant Administrative Direction and Support on the Following Projects-
\$663,674, Master's and Ph.D. Research Projects, University of Oklahoma:**

- “Stability of concrete slabs on grade considering shrinkage and a moisture gradient”
P.I.: Chris Ramseyer
Sponsor: Oklahoma Transportation Center
Amount: \$199,000.00
Duration: 01/15/2010 to 01/14/2012
- “Facilitated Experimental Learning Program – Camp Concrete”
P.I.: Wilson Brewer, Langston University
Co-P.I.: Chris Ramseyer
Sponsor: Oklahoma Transportation Center
Amount: \$225,000.00
Duration: 06/01/2009 to 05/31/2012
- "Curl and Shrinkage of Concrete Slabs on Grade."
P.I.: Chris Ramseyer
Sponsor: CTS – Cement Manufacturing Corp.
Amount: \$119,666.00
Duration: August 2007 to September 2008
- "Bending Capacity of Cold Formed Steel Purlins with an Innovative Bracing System Using the Base Test Method”
P.I.: Chris Ramseyer
Sponsor: Star Building Systems
Amount: \$10,008.00
Duration: August 2005 to August 2006
- The successful completion of 57 Base Tests (My M.S. Research Project) led to the following Fears Lab Capital Program - Building Donation
Donor: Star Building Systems – August 2006
Items: 30' x 144'-7" (4338 sq ft) Expansion to Fears Structural Engineering Laboratory
Estimated Value of Donation: \$110,000.00

Internal Funding – Awarded (\$61,847.74)

- “Division of Architecture Publication Incentive Program Award”
Published Paper in 2018: **Shideh Shadravan**
Sponsor: Division of Architecture
Amount: \$1000.00
Duration: June 2019



- “Growth Fund - Piranha Clip”
P.I. : Andres Cavieres OU
Co-P.I.: **Shideh Shadravan**, Zahed Siddique, Chris Ramseyer OU
Sponsor: Office of Technology Development, University of Oklahoma
Amount: \$50,000.00
Duration: August 2018- August 2019
- “Visiting 12-Big Schools”- Educational Research-Travel Fund
P.I.: **Shideh Shadravan** OU
Sponsor: GCA – Division of Architecture
Amount: \$1,200.00
Duration: October 2018
- “Hurricane Harvey”-Case Study- Travel Fund
P.I.: **Shideh Shadravan** OU
Sponsor: GCA– Division of Architecture
Amount: \$1,200.00
Duration: August 2017
- “Compressed Earth Block (CEB) Project”
P.I.: **Shideh Shadravan**, Matt Reyes, Dan Butko, Lisa Holliday OU
Sponsor: GCA - Research Enhancement Application (SEED)
Amount: \$2,698.38
Duration: August 2016- December 2017.
- “ICSA-2016 International Conference”- Educational Research- Travel Fund
P.I.: **Shideh Shadravan** OU
Sponsor: GCA – Division of Architecture
Amount: \$2997.33
Duration: July 2016
- “Visiting Structure Professors” - Educational Research- Travel Fund
P.I.: **Shideh Shadravan** OU
Sponsor: GCA – Division of Architecture
Amount: \$2752.03
Duration: June 2015

Proposals (not funded - External and Internal)

- “Investigation of Residential Building Resilience in Hurricane and Tornado Prone Areas”
P.I.: **Shideh Shadravan** OU
Sponsored: AAUW- American Association of University Women
Amount: \$6,000.00
Duration: July 2019-July 2020



- “Integrated Design Improvements for TenK Solar DUO Racking System”
P.I.: Andres Cavieres OU
Co-P.I.: Zahed Siddique, and **Shideh Shadravan** OU
Sponsored: Ten K Solar, Private,
Amount: \$100,000.00
Duration: Aug. 2016- Aug. 2018
- “Improved High Wind Disaster Resilience”
P.I.: Chris Ramseyer OU
Co-P.I.: **Shideh Shadravan**, Lisa Holliday, Royce Floyd, and Dan Butko OU
Sponsored: NIST National Institute of Standard and Testing
Amount: \$1,000,000.00
Duration: Sep. 2016-Sep. 2019
- “Generating Resilient, Sustainable, and Climate-Adaptive Infrastructure”
P.I.: **Shideh Shadravan** OU
Sponsored: JFF Junior Faculty Fellowship
Amount: \$7,000.00
Duration: Jan. 2016- Jan. 2017
- “Development of Guidelines for High-Volume Recycled Materials for Concrete Pavement”
P.I.: **Shideh Shadravan** OU
Co-P.I.: Chris Ramseyer OU, and Behnam Shadravan Florida A&M University
Sponsored: Southern Plains Transportation Center SPTC 15-2
Amount: \$140,800.00
Duration: Jan. 2015 – Jan. 2017
- “Generating Resilient, Sustainable, and Climate-Adaptive Infrastructure for the Present and Future”,
P.I.: **Shideh Shadravan** OU
Co-P.I.: Chris Ramseyer OU, and Behnam Shadravan Florida A&M University
Sponsored: Southern Plains Transportation Center SPTC 15-1,
Amount: \$80,000.00
Duration: Jan. 2015 – Jan. 2016
- “Development of a SFE Database for Screening of Mixes for Moisture Damage in Oklahoma”,
P.I.: **Shideh Shadravan** OU
Co-P.I.: Chris Ramseyer OU
Sponsor: Southern Plains Transportation Center SPTC 15-2,
Amount: \$100,000.00
Duration: Jan. 2015 – Jan. 2017



- “Developing of Mix Data to Prevent Moisture Damage in Oklahoma Roads, Highways, and Bridges”,
P.I.: **Shideh Shadravan** OU
Co-P.I.: Lisa Holliday OU
Sponsor: Southern Plains Transportation Center SPTC 15-2,
Amount: \$100,000.00
Duration: Jan. 2015 – Jan. 2017

PUBLICATIONS

Peer Reviewed Journal Publications, Book Chapters, and National Publication

- **Shadravan, S.**, Ramseyer, C. C., and Floyd, R.W. (2019), "Comparison of Structural Foam Sheathing and Oriented Strand Board Panels of Shear Walls Under Lateral Load". *Advances in Computational Design- Techno Press, An International Journal*, July 2019.
- **Shadravan, S.**, and Ramseyer, C. C. (2019), "Investigation of Design Values Computation of Wood Shear Walls Constructed with Structural Foam Sheathing". *Advances in Computational Design- Techno Press, An International Journal*, July 2019.
- **Shadravan, S.**, Callahan, M., and Obasade, Y. (2019), " Research Initiatives: Structural Application into Design Process". Published in Book “*Structures and Architecture - Bridging the Gap and Crossing Borders*”. **Book Chapter**-CRC Press Taylor and Francis Group, April 2019.
 - ISBN 9781138035997
 - <https://www.crcpress.com/Structures-and-Architecture---Bridging-the-Gap-and-Crossing-Borders-Proceedings/Cruz/p/book/9781138035997>
- **Shadravan, S.**, Ramseyer, C. C., and Floyd, R.W. (2019), "Lateral Resistance of Strapped Wood Shear Walls". *Journal of Structural Integrity and Maintenance, Taylor and Francis*, Volume 4, Pages 65-75, May 2019.
 - <https://doi.org/10.1080/24705314.2019.1603193>
- **Shadravan, S.**, Emde, M., and Ramseyer, C. (2018), "Investigation of Torsional Bracing of Cold-Formed Steel Roofing Systems". *Journal of Structural Integrity and Maintenance, Taylor and Francis*, Volume 4, Pages 6-14, Feb. 2019.
 - <https://doi.org/10.1080/24705314.2019.1567046>
 - Selected as one of 2019 Editor’s Chosen Articles
 - https://think.taylorandfrancis.com/bes-jsim-ec/?utm_source=CPB&utm_medium=cms&utm_campaign=JMT05467
- **Shadravan, S.**, and Ramseyer, C.C. (2018), "Investigation of Wood Shear Walls Subjected to Lateral Load". *Journal of Structures, Elsevier*, Volume 16, Pages 82-96, Nov. 2018.
 - <https://doi.org/10.1016/j.istruc.2018.08.007>



- Ramseyer, C.C. and **Shadravan, S.** (2016), "Bending Capacity of Cold Formed Z-Purlins Supporting a Standing Seam Roof System with Torsional Bracing". *Journal of Structural Integrity and Maintenance, Taylor and Francis*, Volume 1, Pages 177-188, Nov. 2016.
 - ISBN: 2470-5314
 - <https://doi.org/10.1080/24705314.2016.1240527>
- **Shadravan, S.**, Kang, T., and Ramseyer, C. (2016), "Dimensional Stability of Concrete Slabs-on Ground". *ACI Special Publication 307; Shrinkage Compensating Concrete – Past, Present and Future*, ACI, Pages 53-65, March 2016.
 - ISBN-13: 978-1-942727-70-5.
 - <https://www.concrete.org/publications/internationalconcreteabstractsportal/m/details/id/51688877>
- Callahan, M., **Shadravan, S.**, and Leinneweber, C. (2016), "Blending Structural Application into Architectural Design Studios: Experiments Based Academic Case Studies". Published in Book: "*Structures and Architecture Beyond Their Limits*". **Book Chapter**- *CRC Press Taylor & Francis Group*, April 2016.
 - ISBN 9781138026513
 - <https://www.crcpress.com/Structures-and-Architecture-Beyond-their-Limits/Cruz/p/book/9781138026513>
- **Shadravan, S.**, Ramseyer, C.C., and Kang, T. (2015), "A Long Term Restrained Shrinkage Study of Concrete Slabs on Ground". Submitted to *Engineering Structures, Elsevier*, Volume 102, Pages 258-265, Nov. 2015.
 - <http://dx.doi.org/10.1016/j.engstruct.2015.08.018>

National Group Study -Publication

- APA- The Engineered Wood Association: "Product Advisory: Performance of Flexible Structural Sheathing (Independent Evaluations of Published Design Values)", *SP-1186*, July 2018, revised May 2019.
 - Collaborated with Clemson University and APA- The Engineered Wood Association
 - http://www.texasinspector.com/files/SP-1186_Flexible_Sheathing-unlocked.pdf

Peer Reviewed Journal Publications-Submitted-Under Peer Review

- **Shadravan, S.** and Shadravan, B. (2019), "An Overview of Old Persian Domes and Arches". *Journal of Architectural Engineering JAE*. Under Peer Review.
- **Shadravan, S.** and Shadravan, B. (2019), "Case Study of Building Resilience in Hurricanes Harvey and Irma 2017". *Journal of Architectural Engineering JAE*. Under Peer Review.



- **Shadravan, S.** and Hasenfrantz, E. (2019), "Case Study: Flipping the Structural Classroom in Architecture and Construction Science Programs". *Journal of Professional Issues in Engineering Education and Practice*, Under Peer Review.

Peer Reviewed Conference Proceeding Papers-Published and Presented

- **Marjorie Callahan, M.,** Shadravan, S., Obasade, Y., and Hasenfrantz, E. (2019), "A Student-Centered Active Learning Approach to Teaching Structures in a Bachelor of Architecture Program". *Building Technology Educator's Society BTES 2019 Conference*, University of Massachusetts Amherst, June 2019.
 - <https://scholarworks.umass.edu/btes/vol2019/iss1/20/>
- **Shadravan, S.** Ramseyer, C. (2019), "Structural Foam Sheathing Test Program". *ASCE AEI-2019 Architectural Engineering Institute Conference*, Pen State, College of Engineering, Tyson, VA, April 2019.
 - <https://ascelibrary.org/doi/abs/10.1061/9780784482261.029>
- **Shadravan S.,** Fithian L., Callahan M., and Afkhamiaghda M. (2019), "Design Technology: Architects' Early Impact on Indoor Air Quality". *ASCE AEI-2019 Architectural Engineering Institute Conference*, Pen State, College of Engineering, Tyson, VA, April 2019.
 - <https://ascelibrary.org/doi/abs/10.1061/9780784482261.026>
- Shadravan, S., **Shadravan, B.** (2019), "The Ancient Persian Domes and Arches, Where The Structural Spiritual and Architectural Aspects Coincide". *ASCE AEI-2019 Architectural Engineering Institute Conference*, Pen State, College of Engineering, Tyson, VA, April 2019.
 - <https://ascelibrary.org/doi/abs/10.1061/9780784482261.033>
- Shadravan, S., Reyes, M. D., Butko, D. J., Holliday L. M., H. R. Kenneth, and **Huizar, J.** (2017), "Sustainability of Compressed Earth Block Construction: Comparative Analysis of Compressed Stabilized Earth Blocks and Traditional Wood Framed Single Family Residences". *ACSE AEI Architectural Engineering Institute Conference*, Oklahoma City, Oklahoma, April 2017.
 - <https://ascelibrary.org/doi/10.1061/9780784480502.030>
- **Shadravan, S.,** and Ramseyer, C.C., (2017), "Torsional Bracing of Cold-Formed, Roof Systems". *ACSE AEI Architectural Engineering Institute Conference*, Oklahoma City, Oklahoma, April 2017.
 - <https://ascelibrary.org/doi/10.1061/9780784480502.059>



- **Ramseyer, C.**, and Shadravan, S. (2014), "Volume Change and Dimensional Stability of Concrete Pavement". *The National Academics of Engineering, Transportation Research Board TRB Conference Proceeding*, Jan. 2014.
 - <https://trid.trb.org/view/1287779>
- **Shadravan, S.**, Ramseyer, C.C. (2007), "Bending Capacity of Cold Formed Steel Purlins with Torsional Bracing Using the Base Test Method ". *Annual Stability Conference, Structural Stability Research Council*, New Orleans, Louisiana, April 2007.
 - NOTE: This paper is cited in the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Member in section D3 Lateral Bracing of the Specification and Commentary (Page 125 section 16.4.2).

Peer-Review Conference Proceeding, Accepted Abstract- Paper Under Process

- **Shadravan, S.**, Reagina (2020), "Improved Design Practices for Tornado Resilient Residential Buildings". *Residential Building Design and Construction Conference, Proceeding Conference*, Pen State Conference Center, April 2019.
- **Shadravan, S.**, Ramseyer, C., and Shadravan, B. (2020), "Strength Evaluation of Wood Shear Walls with Structural Foam Sheathing". *Residential Building Design and Construction Conference, Proceeding Conference*, Pen State Conference Center, April 2019.
- Shadravan, B., and **Shadravan, S.** (2020), "An Analytical Approach to Assess the Structural Resiliency and Sustainability of Wood Shear Walls". *Residential Building Design and Construction Conference, Proceeding Conference*, Pen State Conference Center, April 2019.

Additional Presentations

- **Shadravan, B.** and Shadravan, S. (2019), "The Lessons for Hurricane Resilience". *ASCE International Conference on Sustainable Infrastructure, ICSI 2019*, Proceeding Conference, Los Angeles, California, Nov. 2019.
- Shadravan, S., **Callahan, M.**, Obasade, Y. (2019), "Research Initiatives: Structural Application into Design Process". *ICSA 2019 Portugal International Conference*, July 2019.
- **Shadravan, B.**, and Shadravan, S. (2019), "An Investigation of Building Resilience in Hurricanes Case Study: Harvey and Irma 2017 Hurricanes". *ASCE AEI-2019 Architectural Engineering Institute Conference*, Pen State, College of Engineering, Tyson, VA, April 2019.
- **Shadravan, S.**, Callahan, M. and **Obasade, Y.** (2018), "Case Study: Educational Options to Reform Structural Application in Design Studio". *The Environmental Design Research Association EDRA 49*, June 2018.



- **Shadravan, S., Standohar-Alfano, C. D.** (2017), "Combined Shear and Uplift Testing of Wood Shear Walls". *13 Americas Conference on Wind Engineering*, May 2017.
- Callahan, M., **Shadravan, S.**, and Leinneweber, C. (2016), "Blending Structural Application into Architectural Design Studios: Experiments Based Academic Case Studies". *ICSA 2016 Portugal International Conference*, July 2016.
- Hosseini, M., Shadravan, S., and **Farshadmanesh, P.** (2013), "A Simple Procedure for Evaluation of Baffles Arrangement Effects on Sloshing Phenomenon in Rectangular Tanks Subjected to 3- Dimensional Earthquake Excitation Using FVM-ANN Technique". *SE-50EEE International Conference on Earthquake Engineering*, Skopje, Macedonia, May 2013.
- **Shadravan, S.**, and Ramseyer, C. (2012), "Dimensional Stability of Type K Concrete Slabs-on Ground". *American Concrete Institute, Annual Fall Convention, Shrinkage-Compensating Concrete Technical Session*, Toronto, Canada., Oct. 2012.
- **Shadravan, S.**, Ramseyer, C.C. (2011), "Dimensional Stability of Slabs on Grade". *Oklahoma Transportation Center – Summer Symposium*, Midwest City, Oklahoma, July 2011.
- Ramseyer, C.C., **Shadravan, S.** (2010), "Dimensional Stability of Concrete Slabs on Grade". *ACI Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, May 2010.
- **Ramseyer, C.C.**, Shadravan, S. (2010), "Investigation of the Dimensional Stability of Concrete Slabs on Grade at the Advanced Concrete Research Laboratory". *American Concrete Institute, Annual Fall Convention*, St. Pittsburgh, Pennsylvania, Oct. 2010.
- **Shadravan, S.**, Ramseyer, C.C. (2010), "Investigation of Dimensional Stability of Concrete Slabs on Grade". *Annual OTC Summer Symposium*, Midwest City, Oklahoma, July 2010.
- **Ramseyer, C.C.**, Shadravan, S. (2009), "Investigation of the Dimensional Stability of Concrete Slabs on Grade at Advanced Concrete Research Laboratory". *American Concrete Institute, Annual Fall Convention*, New Orleans, Louisiana, Nov. 2009.
- Ramseyer, C.C., **Shadravan, S.** (2009), "CTS - Dimensional Stability of Concrete Slabs on Grade". *American Concrete Institute, Annual Fall Convention*, New Orleans, Louisiana, Nov. 2009.

Accepted Abstracts, not Presented

- **Shadravan, S.**, Hasenfratz, E., Callahan, M. (2019), "An Investigation of Flipping a Structures Class in an Architecture Program", *Building Technology Educator's Society BTES 2019*.



- Ghosh, T., Callahan, M., **Shadravan, S.**, and Fithian, L. (2019), "Mycelium-Glass Brick Unit: A New Composite Material for Construction". *Materials Education Symposia, 11th International Materials Education Symposium (IMES 2019)*, Clare College, Cambridge.
- Ghosh, T., Callahan, M., **Shadravan, S.**, and Fithian, L. (2019), "Developing a Composite Mycelium-Glass Brick Unit". *Advanced Material Congress (AMC) Conference 2019*, Stockholm, Sweden.
- Ghosh, T., Callahan, M., **Shadravan, S.**, and Fithian, L. (2019), "Mycelium-Glass Brick Unit: A New Composite Material for Construction". *Advanced Material Congress (AMC) Conference 2019*, Stanford University, Stanford, California.

Paper & Abstract not Accepted

- Ghosh, T., Callahan, M., **Shadravan, S.**, and Fithian, L. (2019), "Mycelium-Glass Brick Unit: A New Composite Material for Construction". *Integration and Innovation, 2019 Building Technology Educators' Society Conference (BTES)*. University of Massachusetts Amherst, Massachusetts, Abstract.
- **Shadravan, S.**, Emde, M., and Ramseyer, C. (2019), "Investigation of Torsional Bracing of Cold-Formed Steel Roofing Systems". *ASCE Architectural Engineering Institute Proceeding Conference*, Paper.
- **Shadravan, S.**, Fithian, L., Callahan, M., Afkhamiaghda, M. (2017). "Computational Fluid Dynamics". *Technology/Architecture + Design (TAB)*, Paper.
- **Shadravan, S.**, Callahan, M. P., Leinnewenber, C. (2016), "Interfacing Structural and Architectural Design Pedagogy: Structure and Material as Design Catalyst". *Association of Collegiate Schools of Architecture ACSA-2016*, Paper.
- **Shadravan, S.**, Ramseyer, C. (2015), "Effect of CSA on Dimensional Stability of concrete Slabs on Grade in Comparison to Typical PCC, HCC and SRA". *International Conference Structures and Architecture ICSA 2016*, Paper.
- Callahan, M. P., **Shadravan, S.**, Leinnewenber, C. (2015), "A Collaborative Case Study: Structure and Material Research Informs Design Sequence". *Association of Collegiate Schools of Architecture ACSA-2015*, Paper.



SERVICE

University/ College/ Division

- **Academic Appeals Panel,**
To University & College
University of Oklahoma (August 2017-August 2018)
Gibbs College of Architecture

- **Collaborated with College of International Studies,**
To University & College
University of Oklahoma (August 2017-Present)
Farzaneh Scholarship Committee

- **Committee Member,**
To College
PhD program coordinator. (August 2017 - Present)
University of Oklahoma – Norman
Gibbs College of Architecture

- **Commencement/ Convocation Marshal,**
To College
Graduation- Leadership, (May 2017, 2018, 2019)
Gibbs College of Architecture

- **Faculty Search Committee,**
To College
Member of Faculty Search Committee (2018)
Gibbs College of Architecture
Division of Construction Science (CNS)

- **Student Development Committee Member,**
To College & Division
Recruiting Graduate students (Fall 2014 – Present)
Gibbs College of Architecture

- **Internship Committee Member,**
To College & Division
Provided Students- internship or job. (Fall 2015 – Present)
Gibbs College of Architecture
 - Included hiring students to work as Research Assistant with me on my research (27 students)
 - 12 Graduates (8 ARCH, 3 CNS, 1 CEES)
 - 15 Undergrads (4 ARCH, 6 CNS, 5 CEES)

National/International

Technical Committee member of International Conference on Civil Engineering and Architecture (ICCEA) 2019- 2nd International Conference on Civil Engineering and Architecture

- <http://www.iccea.org/committee.html>



National Group Study

Collaborated with Clemson University and APA- The Engineered Wood Association: “Product Advisory: Performance of Flexible Structural Sheathing (Independent Evaluations of Published Design Values)”, *SP-1186*, Published July 2018, Revised May 2019.

Professional Report

Submitted to:

- APA- The Engineered Wood Association- May 2019
- APA- The Engineered Wood Association- Feb. 2018
- Insurance Institute for Business & Home Safety (IBHS)- Dec. 2017

Peer Reviewed Papers by Shideh Shadravan

- Erick, B. A., Smith, M. D., and Fillmore, T.B. (2019), "Feasibility of Retrofitting Existing Miter-Type Lock Gates with Discontinuous Contact Blocks", *Journal of Structural Integrity and Maintenance*, Taylor and Francis, Reviewed by **Shideh Shadravan**, Be Published in September 2019.
- Tripura, D. D., and Das, S. (2017), "Shape and Size Effects on the Compressive Strength of Cement Stabilized Rammed Earth", *ASCE Architectural Engineering Institute 2017 Conference*, Page 336 – 348, Reviewed by **Shideh Shadravan**, April 2017.
 - <https://ascelibrary.org/doi/10.1061/9780784480502.028>
- Berry, E., Shadravan, B., and Tehrani, F. M. (2017), "A Sustainable Approach to Assess the Resilience of Perforated Wood Shear Walls", *ASCE Architectural Engineering Institute 2017 Conference*, Page 506-512, Reviewed by **Shideh Shadravan**, April 2017.
 - <https://ascelibrary.org/doi/10.1061/9780784480502.042>
- Hoff, G. C. (2014), "A Look Back at 1974 Type K Cement", American Concrete Institute (ACI), Reviewed by **Shideh Shadravan**. March 2016.
 - <https://www.concrete.org/publications/internationalconcreteabstractsportal.aspx?m=details&i=51688875>
- McLean, E., Ramseyer, C., and Roswurm, S. (2014), "600 Crack-Free Bridges Using Shrinkage Compensating Concrete", *American Concrete Institute (ACI)*, Reviewed by **Shideh Shadravan**. March 2016.
 - <https://www.concrete.org/publications/internationalconcreteabstractsportal.aspx?m=details&i=51688879>



INDUSTRY EXPERIENCE

Oklahoma Department of Transportation (ODOT), Oklahoma City, OK Bridge Design Engineer	2013- 2014
Structures America Innovative, Edmond, OK Design Engineer	2009-2010
Star Building Systems, Moore, OK Design Engineer	2006-2009
Consultant Engineering, Tehran, Iran Consultant Engineer	1995-2001
Civil Engineering Organization of Tehran Municipality, Tehran, Iran Project Manager	1995-2001
Civil Engineering Organization of Tehran Municipality, Tehran, Iran Cost Estimator	1993-2001

OTHER EXPERIENCE AND SKILLS

- *Experience* in a heavy structural lab (Donald G. Fears Structural Engineering Laboratory-OU- CEES)
 - Utilizing cranes
 - Welding
 - Fabrication: steel, concrete, and wood
 - Use of a Plasma torch
- *Experience in* utilizing lab instruments for the concrete material testing and characterization such as measurement of concrete compression strength, shrinkage and expansion, and relative humidity.
- *Experience* in utilizing data acquisition for the measurement of steel load, air pressure, stress, strain and deflection.
- *Experience* in utilizing MTS for the measurement of load and displacement during monotonic and cyclic tests.