TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Yoo-Jae Kim Title: Professor

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
Doctor of Science	2004	Washington University in St. Louis, MO	Civil Engineering	Confined Lightweight Concrete
Master of Construction Management	1998	Washington University in St. Louis, MO	Construction Management	Advantages of the AIA Contract Form
Master of Science	1994	Kon-Kuk University, South Korea	Architectural Engineering	An Experimental Study on the Properties of the Insulated Concrete used of Artificial Lightweight Aggregate
Bachelor of Science	1990	Kon-Kuk University, South Korea	Architectural Engineering	

C. University Experience

Position	University	Dates
Professor, Engineering Technology	Texas State University	2020 – present
Associate Professor, Engineering Technology	Texas State University	2015 – 2020
Assistant Professor, Engineering Technology	Texas State University	2009 – 2015
Core Faculty, Material Science, Engineering, and Commercialization Program	Texas State University	2014 – present
Adjunct Faculty, Material Science, Engineering, and Commercialization Program	Texas State University	2012 – 2013
Research Associate, Civil Engineering	Washington University in St. Louis	2004 – 2005
Research Assistant, Civil Engineering	Washington University in St. Louis	1998 – 2004
Teaching Assistant, Civil Engineering	Washington University in St. Louis	2000 – 2004
Teaching Assistant, Architectural Engineering	Kon-Kuk University – Seoul, South Korea	1992 – 1994

D. Relevant Professional Experience

Position	Entity	Dates
Visiting Researcher	Korea Institute of Civil Engineering and Building Technology - Fire Investigation, Research, testing and Education Div. Hwaseong, Gyeonggi-do, South Korea	2016 – 2017 Spring 2024
Project Structural Engineer	High Concrete Group LLC., Denver, PA	2005 – 2009
Construction Manger Internship	Department of Facilities Planning and Management at Washington University in St. Louis	Spring 1998
Survey Officer (Lieutenant)	Third Infantry Division, Korean Military	1990 – 1992

E. Other Professional Credentials (licensure, certification, etc.)

- Professional Engineer, Texas – License No. 109163,
- Professional Engineer, West Virginia – License No. 17729
- Fundamental Engineer (EIT), Michigan
- Leadership in Energy & Environmental Design Accredited Professional (LEED AP®), U.S. Green Building Council
- Seismic Rehabilitation Process and Evaluation – Federal Emergency Management Agency (FEMA)
- Concrete Field Test Technician Level I **–** American Concrete Institute, No. 1110372
- ACI-CRSI Adhesive Anchor Installer **–** American Concrete Institute, No. 1110372
- Precast Concrete Quality Control Level I **–** Prestressed/precast Concrete Institute No.12604.
- Precast Concrete Quality Control Level II – Prestressed/precast Concrete Institute No. 21959.
- Risa 3D Level I, II and III – Risa Technologies, Foothill Ranch, CA.
- Tekla Structures 14 – Tekla USA, Atlanta, GA.
- Adhesive Anchors Installation – Hilti, Inc. US.
- Designing Your Online Course (DYOC) – Quality Matters, Aug. 22nd, 2019

II. TEACHING

A. Teaching Honors and Awards:
"Graduating Student Recognition of Campus Support Program". Named by Five alumni from the school as one of the faculty that contributed significantly to their success and development. (Spring10, Summer10, Spring12, Spring13)

B. Courses Taught:
Texas State University (2009 – present)
CSM 5360 Construction Company Financial Control (Summer I 2018 - Present)
CSM 5364 Decision Making in Construction Management (FL 2020 - present)
CSM 4368 Environmentally Conscious Design and Construction (SP 2020)
CSM 3361 Commercial Construction Systems
CSM 3367 Mechanical, Electrical, and Plumbing Systems (FL 2010 - present)
TECH 4390 Internship (Summer I 2010)
CSM 5306 Fundamental Commercial Construction
TECH 5382 Industrial Ecology (Summer I 2010)
CIM 3366 Application of Concrete in Construction (FL 2010 - present)
CIM 4310 Senior Labs (FL 2010 - present)
TECH 2190 Internship (SU 2020- present)

Washington University in St. Louis (2000 – 2004)
Mechanics of Materials (Deformable Bodies) – Washington University, SP 2003 and SP 2004
Advanced Reinforced Concrete Design – Washington University, FL 2001 to FL2003
Composite Structures – Washington University, SP 2001

Kon-Kuk University (1992 – 1994)
Construction Materials Lab – Kon-Kuk University, FL 1992 and SP 1993
Properties of Construction Materials – Kon-Kuk University, FL 1993 and SP 1994

Architectural Design – Kon-Kuk University, FL 1992 and FL 1993

C. Graduate Theses/Dissertations, Honors Theses, or Exit Committees

Supervisor for graduate Thesis,

Shishir C Roy, MS in Construction Management
Thesis Title: Fire Responses Optimization of GGBFS-Based Sustainable Concrete under Elevated Temperatures Using Response Surface Methodology (RSM)
Graduation: FL 2026.

Ryno Van Leeuwen, MS in Technology, Department of Engineering Technology
Thesis Title: Life Cycle Analysis of Portland Limestone Concrete.
Graduation: FL 2016.

Kotwal, R. Ashley, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Alkaline Activation of Ambient Cured Geopolymer Mortar and Concrete based on Class C Fly Ash.
Graduation: FL 2012.

Committee Member:

Shyaamkrishnan Vigneswaran, PhD in Material Science, Engineering & Commercialization

Thesis Title: Performance Evaluation of Goose Asphalt Binder: A Comprehensive Study on Properties and Applications.

Graduation: SU 2025

Navid Hemmati, PhD in Material Science, Engineering & Commercialization
Thesis Title: Characterization of Polymer Modified Asphalt Binders Containing Processed Oil.
Graduation: SU 2023.

Ikechukwu K. Okechi, PhD in Material Science, Engineering & Commercialization
Thesis Title: Ettringite-based binders such as calcium aluminate cement (CAC), calcium sulfoaluminate cement (CSA), and the blends CAC and CSA with Portland cement.
Graduation: SP 2023.

Sushmitha Mercy Joseph Prabhakar, M.S. in Technology Management
Thesis Title: An Accelerated Test Method to Evaluate Cementitious Mixtures Subjected to Chemical Sulfate Attack.
Graduation: SU 2020.

Vanderlei Gomes Priscila, M.S. in Technology Management
Thesis Title: Analysis of Concrete Samples to Mitigate Sulfate Induced Swelling in Concrete Pavements in West Texas Highways.
Graduation: SU 2020.

Mazumder, Mithil, PhD in Material Science, Engineering & Commercialization
Thesis Title: Characterization of Polymer Modified Asphalt Binder containing Wax additives.
Graduation: SU 2019.

Thombare, Omkar H., MS in Technology, Department of Engineering Technology
Title: Accelerated Carbonation Assessment of Fly Ash Concrete at 57% Relative Humidity.
Graduation: SU 2019.

Okechi, Ikechukwu K., MS in Technology, Department of Engineering Technology
Title: Alkali Silica Reactivity of Blended Class C and Class F Fly Ash Systems
Graduation: SU 2019.

Bum-Yean Cho, PhD in Architectural Engineering, Department of Architectural Engineering, University of Seoul
Title: Fire damage assessment of concrete filled steel tube (CFT)
Graduation: SP 2018.

Devanda R. Lek, PhD in Material Science, Engineering & Commercialization
Thesis Title: Design and Development of a Kinematic Coupling for a Double-Sided Hot Embossing Process.
Graduation: FL 2018.

Ahmed Wajahat Ali, MS in Technology, Department of Engineering Technology
Title: Multiple Stress Creep Recovery (MSCR) characterization of Polymer Modified Asphalt binder containing wax additives.
Graduation: SP 2018.

Jaswanth Pattipati, MS in Technology, Department of Engineering Technology
Title: Flexural Strength, Elastic Modulus, Splitting Tensile and Poisson's Ratio of High Strength Concrete made with Foundry Sand
Anticipated Graduate: SP 2018.

Anup A. Sarnot, MS in Technology, Department of Engineering Technology
Title: Natural Carbonation of Concrete
Graduate: FL 2017.

Rupesh Bejugam, MS in Technology, Department of Engineering Technology
Title: Finding an equation for void ration in pervious concrete.
Graduation: SP 2017.

Hyunhwan Kim, PhD in Material Science, Engineering & Commercialization
Thesis Title: Characterization of Rubberized Asphalt Binders with Wax Warm Additives.
Graduation: FL 2016.

Nicholas A. Tuttle, MS in Technology, Department of Engineering Technology
Title: Design-Bid Build and Construction Manager At-Risk using the Iron Triangle of Success in Public Schools.
Graduation: FL 2016.

Harnish Sharma, MS in Technology, Department of Engineering Technology
Title: Modelling the Life-Cycle Impact of Concrete through Comparative Life Cycle Analysis.
Graduation: SP 2016.

Juan Gomez, PhD in Material Science, Engineering & Commercialization
Thesis Title: Fabrication of Interconnecting Through-holes in Polymer Microfluidic Devices for Modular Systems.
Graduation in FL 2015.

Devanda R. Lek, MS in Technology, Department of Engineering Technology
Thesis Title: A Study on Radial Runout for Circular Geometries.
Graduation: SU I 2014.

Ana Daniela Ugartechea Garcia, MS in Technology, Department of Engineering Technology.

Thesis Title: Assessment of Current ACI 440.2R-08 Design Guidelines and Evaluation of Hoop Strain in FRP Confined Concrete.
Graduation: SU I 2014.

Cade Humphries, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Examination of Potential Cost Benefits for Converting Surfaced Roads to Un-Surfaced Roads in Texas.
Graduation: SP 2013.

Juan Gomez, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Cavity Filling Analysis in Micro Hot Embossing.
Graduation: SU I, 2012.

Zhuo Wang, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Effect of Aggregate Moisture Conditions on Rheological Behaviors of High-Workability Mortar Prepared with Fine Recycled-Concrete Aggregate.
Graduation: SP 2012.

D. Courses Prepared and Curriculum Development:
New course development and first time taught at Texas State:

Course development
CIM 3420 Fundamentals of Concrete: Properties and Testing
CIM 5340 Innovation Strategies of the Concrete Industry
CIM 4210 Senior Labs, Fall 2011
CIM 3366 Application of Concrete in Construction, Spring 2011
TECH 3367 Mechanical, Electrical, and Plumbing Systems, Spring 2010
TECH 5382 Industrial Ecology, Summer I 2010
TECH 3361 Commercial Construction Systems, Fall 2009
TECH 5306 Fundamental Commercial Construction, Fall 2009
CSM 5364 Decision Making in Construction Management, Fall 2020
CSM 5360 Construction Company Financial Control, Spring 2021
CSM 5364 Decision Making in Construction Management, Fall 2024 (On-Line Class)
CSM 5364 Decision Making in Construction Management, Fall 2024 (8Weeks, On-Line Class, Summer and Fall 2024)
CSM 5360 Construction Company Financial Control, Spring/Summer 2026 (On-Line Class)
CSM 5360 Construction Company Financial Control, Spring/Summer 2026 (8Weeks, On-Line Class, Spring and Summer 2025)

New course development
CSM 5360 Construction Company Financial Control
CIM 5340 Innovation Strategies of the Concrete Industry
CIM 3366 Application of Concrete in Construction, Spring 2011
CIM 4210 Senior Labs, Fall 2011

Curriculum development
Designed syllabus for CIM 5340 Innovation Strategies of the Concrete Industry, a graduate required class, starting from SU I 2015
Designed syllabus for CIM4210 Senior Labs, an undergraduate required class, Fall 2011
Designed syllabus for CIM3366 Application of Concrete in Construction, an undergraduate required class, Spring 2011

E. Funded External Teaching Grants and Contracts:

1) Kim, Y. J., Mechanical Contracting Education & Research Foundation (MCERF), 2016, "Mechanical and Electrical Faculty Boot Camp at Lenexa, Kansas", Amount: $300.00

F. Submitted, but not Funded, External Teaching Grants and Contracts:

None

G. Funded Internal Teaching Grants and Contracts:

2) Student Computing Resources, 2010, CoPIs Kim, Y. J. and Winek, G. "Major Upgrade of the RFM 4236: Computer Integrated Construction Laboratory to Offer High-Performance Computing and Visualization for Engineering Technology Students", Amount: $56,096.50

1) "Travel Fund Program for excellence in teaching and learning", Texas State University-San Marcos, (April 2010), PI, Amount $800

H. Submitted, but not Funded, Internal Teaching Grants and Contracts:

None

I. Other:

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Books (if not refereed, please indicate)

a. Scholarly Monographs:

None

b. Textbooks:

None

c. Edited Books:

None

d. Chapters in Books:

1) PCI Design Handbooks, 8th Ed. Precast/Prestressed Concrete Institute Published on November 31, 2017

2) ASCE/SEI 07 – 22, Minimum Design Loads and Associated Criteria for Buildings and Other Structures, American Society of Civil Engineer, March 2022

e. Creative Books:

e*. Working on Creative Books

Analysis of Fiber Composites with Finite Element Method.

2. Articles

a. Refereed Journal Articles: (* denotes corresponding author, Red - Student)

27) Shishir C. Roy, James Wilde, and **Yoo-Jae Kim***, "Experimental Characterization and Machine Learning-Based Modelling of Ternary GGBFS-Limestone Powder Concrete Mix Designs", Asian Journal of Civil Engineering, 2026, Under 1st revision.

26) J. P. Mitchell, Seung-Un Chae, and **Yoo-Jae Kim***, "Finite Element Analysis Using the Crack Strain Separation Model for Reinforced Concrete Membrane", Buildings 2023,13, 1896. https://doi.org/10.3390/ buildings13081896.

25) J. P. Mitchell, Bum-Yean Choo, and **Yoo-Jae Kim***, "Analytical Model of Two-Directional Cracking Shear-Friction Membrane for Finite Element Analysis of Reinforced Concrete", Materials, Vol. 14, No 6, 2021, pp. 1-20. DOI.org/10.3390/ma14061460.

24) Aguayo, F., Torres, A., **Kim, Y.-J**. and Thombare, O., "Accelerated Carbonation Assessment of High-Volume Fly Ash Concrete." Journal of Materials Science and Chemical Engineering, Vol.8, 2020, pp. 23-38. DOI 10.4236/msce.2020.83002.

23) **Yoo-Jae Kim*,** A. Kotwal, Bum-Yean Cho, James Wilde, and Byung Hee You, "Geosynthetic Reinforced Steep Slopes: A Review of Current Technology in the United States." Applied Science Journal, Vol.9, No 10, 2019, pp. 1-24.

22) Harnish Sharma, Anthony Torres, **Yoo-Jae Kim**, Jiong Hu, Vedaraman Sriraman, and Jake Ellis "Building a User-Friendly LCI Prediction Model for Concrete Mixtures." Journal of Sustainable Construction and Material Technologies, Vol. 3, No 1, 2018, pp. 138-155.

21) **Yoo-Jae Kim*,** Bum-Yean Cho, S.-J Lee, J. Hu, and James Wilde "Investigation of rheological properties of blended cement pastes using rotational viscometer and dynamic shear rheometer." Advances in Materials Science and Engineering, Vol. 2018, pp.1-6. 2018.

20) **Yoo-Jae Kim***, Ryno van Leeuwen, Bum-Yean Cho, Vedaraman Sriraman, and Anthony Torres "Evaluation of the Efficiency of Limestone Powder in Concrete and the Effects on the Environment.", Sustainability, Vol. 10, No 2, 2018, pp. 1-24.

19) Ryno Van Leeuwen, **Yoo-Jae Kim***, and Vedaraman Sriraman, "The Effects of Limestone Powder Particle Size on The Mechanical Properties and The Life Cycle Assessment of Concrete.", Journal of Civil Engineering Research, Vol. 6, No. 4, Nov. 2016, pp. 104-113.

18) A. Kotwal, **Yoo-Jae Kim***, H. Jiong, and V. Sriraman, "Characterization and Early Age Physical Properties of Ambient Cured Geopolymer Mortar Based on Class C Fly Ash.", International Journal of Concrete Structures and Materials, Vol. 9, No.1, 2015 pp.35-43. DOI 10.1007/s40069-014-0085-0.

17) **Yoo-Jae Kim***, B. You, V. Sriraman, and A. Kotwal "Behavior of Confined Concrete with Variable Crack Angle - Part I.", Magazine of Concrete Research, Magazine of Concrete Research, Volume 66, Issue 21, 2014 pp. 1075 –1083. doi:10.1680/macr.14.00012.

16) **Yoo-Jae Kim**, V. Sriraman, A. Kotwal, and B. You "Behavior of Confined Concrete with Variable Crack Angle - Part II.", Magazine of Concrete Research, Vol. 66, no.19, 2014 pp. 967-974. doi:10.1680/macr.14.00013.

15) J. Hu, S. Lee, **Yoo-Jae Kim** and M. Mahgoub, "Inspection and Nondestructive Evaluation of Concrete Bridge with Environmental Deterioration", ASCE Geotechnical Special Publications on Climatic Effects on Pavement and Geotechnical Infrastructure, pp. 193-203, March 2014.

14) **Yoo-Jae Kim**, Ashley Kotwal, Hyunhwan Kim, and S.-J. Lee, "Stiffness prediction of recycled aged CRM binders using an artificial neural network." International Journal of Pavement Research and Technology, Vol. 7, No.1, 2014. pp. 9-17.

13) J. Gomez, T. G. Conner, I.-H Song, **Yoo-Jae Kim**, and Byoung Hee You, "Mold Filling Analysis of an Alignment Structure in Micro Hot Embossing", Fibers and Polymers, Vol. 15, No. 6, pp. 1197-1201.

12) A. Kotwal, S. –J. Lee, and **Yoo-Jae Kim***, "Traffic Signal Systems: A Review of Current Technology in the Unites States." Science and Technology, Vol.3, No.1, 2013. pp. 33-41.

11) J. Hu, Z. Wang, and **Yoo-Jae Kim**, "Feasibility Study of using Fine Recycled Concrete Aggregate in Producing Self-Consolidation Concrete," Journal of Sustainable Cement-Based Materials, Vol. 2, No. 1, 2013, pp.20-34.

10) Lee, S.-J., **Kim, Yoo-Jae**, Kotwal, A., Jeong, K.D., "Modeling rutting properties of rubberized asphalt concrete mixtures." Journal of Advanced Construction Materials, Vol. 17, pp. 59-68.

9) J. Gomez, J. Williams, I.-H. Song, **Yoo-Jae Kim**, D.-H. Chun, D.-K. Kim, H.-J. Na, and B.-H. You, "Analysis of Acoustic Characteristics of a Car Cabin Using Computer-Aided Engineering," Applied Mechanics and Materials Journal, Vol. 268-270, 2013, pp.883-889.

8) **Yoo-Jae Kim***, J. Hu, S.-J. Lee, and B. You, "Mechanical Properties of Aerated Lightweight Aggregate Concrete", Magazine of Concrete Research, Vol. 64, no.3, 2012 pp. 189-199.

7) B. Broughton, S.-J. Lee, and **Yoo-Jae Kim**, "30 years of microsurfacing: a review." *ISRN Civil Engineering*, Vol. 2012, Article ID 279643, 7 pages, 2012.

6) **Yoo-Jae Kim***, J. Hu, S.-J. Lee, B. J. Broughton, "Prediction of Compressive Strength of Aerated Lightweight Aggregate Concrete by Artificial Neural Network", Applied Mechanics and Materials Journal, Vol. 84-85, 2011, pp.177-182.

5) **Yoo-Jae Kim***, T. Harmon, B. You, "High Performance Precast Wall Panels with Shear Transfer Provided by Carbon Fiber Grid", Applied Mechanics and Materials Journal, Vol. 84-85, 2011, pp.613-617.

4) M.-G. So, **Yoo-Jae Kim**, G.-G. Yun, S. Dyke, and T. G. Harmon, "Cyclic Shear-Friction Constitutive Model for FEA of Reinforced Concrete Membrane Elements", ACI Structural Journal, Vol. 108, No3, May-June 2011, pp. 324-331.

3) **Yoo-Jae Kim***, H. Jiong, S.-J. Lee, and B. You, "Mechanical Properties of Fiber Reinforced Lightweight Concrete Containing Surfactant" Advances in Civil Engineering, Vol. 2010, pp. 1-8. 2010.

2) **Yoo-Jae Kim***, Thomas G. Harmon, "Analytical Model for Confined Lightweight Aggregate Concrete", ACI Structural Journal, Vol. 103, No 2, March-April 2006, pp. 263-270.

1) Thomas G. Harmon, **Yoo-Jae Kim**, John Kardos, Timothy Johnson, and Andrew Stark, "Bond of Surface-Mounted Fiber-Reinforced Polymer Reinforcement for Concrete Structures", ACI Structural Journal, Vol. 100, No 5, Sep-Oct. 2003, pp. 557-584.

a*. Under Review Refereed Journal Articles: (* denotes corresponding author)

a. Working Refereed Journal Articles: (* denotes corresponding author)**

28) Shishir C. Roy and **Yoo-Jae Kim***, "Behavior of Partially Confined Fiber Concrete", Target: International Journal of Concrete Structures and Materials.

29) Shishir C. Roy and **Yoo-Jae Kim***, "Effects of Porosity on Concrete made with Recycled Concrete Aggregate", Target: Magazine of Concrete Research.

30) Shishir C. Roy and **Yoo-Jae Kim***, "Performance of Concrete Containing GGBFS and Limestone Powder under Rapid Elevated Temperature", Target: Magazine of Concrete Research.

b. Non-refereed Articles:

None

3. Conference Proceedings

a. Refereed Conference Proceedings: (* denotes corresponding author, Red - Student)

20) Shishir, Roy, James Wilde and, **Yoo-Jae Kim***, "Material Model of Fire Damaged Carbon Fiber Confined Concrete" Korea Society of Civil Engineers Annual Conference, KSCE Conference, Jeongseon, South Korea, October 21-23, 2026 (Accepted).

19) **Yoo-Jae Kim***, V. Sriraman, James Wilde, and Shishir, Roy, "Material Model of Fire Damaged Carbon Fiber Confined Concrete" The Civil Engineering Conference in the Asian Region, CECAR10, Jeju, South Korea, October 21-23, 2025.

18) Ryno Van Leeuwen, James Wilde, and **Yoo-Jae Kim*** "Influence of Limestone Filler on Concrete Mechanical Properties" Korea Society of Civil Engineers Annual Conference, KSCE Conference, Jeju, South Korea, October 17-20, 2024.

17) **Kim Yoo-Jae*** and Wilde James, "Carbon Fiber Grid Composite Insulated Wall Panels - Differential Equation Method for Computing Deflection, Moments, and Shears" KSCE Conference, Pusan, South Korea, October 19-22, 2022.

16) Dayananda Shah, James Wilde, Heping Chen, and **Yoo-Jae Kim***, "Ternary Mix design assessment of Ground Granulated Blast Furnace Slag (GGBFS) and limestone powder infused concrete using Gaussian process regression.", KSCE Virtual Conference on Jeju, South Korea, October 22-24, 2020.

15) Ryno van Leeuwen, Vedaraman Sriraman, Byoung-Hee You, and **Yoo-Jae Kim***, "The Effects of Limestone Powder Particle Size on The Mechanical Properties and The Life Cycle Assessment of Precast/Prestressed Concrete.", JPCI Symposium on Fukuoka, Japan, October 20-21, 2016.

14) J. Hu, B. Ledsinger, and **Yoo-Jae Kim**, "Development of Eco-Efficient Self Consolidating Concrete (Eco-SCC) with Recycled Concrete Aggregate", 8th International RILEM Symposium on Self-Compacting Concrete and 6th North American Conference on Design and Use of Self-Consolidating Concrete, Washington, DC, May 15-18, 2016.

13) Araceli Ortiz, Bahram Asiabanpour, Jesus Jimenez, Semith Aslan, Hassan Salamy, **Yoo-Jae Kim**, Engaging Students in Environmental Learning and Awareness of Green Design Technologies and Careers through a Pre-Engineering Program. ASEE Annual Conference, Seattle, WA, June 14-17, 2015.

12) J. A. Gomez, G. Conner, D. Lek, I.-H. Song, **Yoo-Jae Kim**, and B. H. You, "Finite Element Analysis for Reliable Replication of Polymer-Based Alignment Structures in Micro Hot Embossing" ASME 2013 International Mechanical Engineering Congress & Exposition (IMECE), San Diego, CA, USA, Nov. 15-21, 2013.

11) J. Hu, **Yoo-Jae Kim**, and S.-J. Lee, "Behavior of self-consolidation concrete with coarse and fine recycled concrete aggregate" Proceedings of the Fifth North American Conference on the Design and Use of Self-Consolidating Concrete, Chicago, Illinois, USA, May 2013.

10) J. Gomez, T. G. Conner, I.-H Song, **Yoo-Jae Kim**, and Byoung Hee You, "Cavity filling analysis for micro hot embossing," ASME 2012 International Mechanical Engineering Congress & Exposition (IMECE), Houston, TX, USA, Nov. 9-15, 2012.

9) A. Kotwal, **Yoo-Jae Kim***, "Partially Confined Concrete: Value Engineering & Performance Analysis" 2012 PCI National Bridge Conference, , Nashville, TN, September 29- October 3, 2012.

8) A. Kotwal, **Yoo-Jae Kim***, "Recycled Carpet Fiber Reinforced Concrete with Recycled Concrete Aggregate" 2012 Concrete Sustainability Conference, Seattle, WA, May 7-10, 2012.

7) J. Hu, Z. Wang, and **Y. Kim**, "Feasibility Study of Using Recycled-Concrete Fine Aggregate in Self Consolidation Concrete", 2011 Concrete Sustainability Conference, Boston, MA, August 9-11, 2011.

6) **Yoo-Jae Kim***, Harold Messenger, and Thomas G. Harmon, "Composite Insulated Precast Wall Panels with Shear Transfer Provided by Carbon Fiber Grid", The Third Congress of the International Federation for Structural Concrete (fib) 2010, Washington D.C., May 29-June2, 2010.

5) Lee, S.-J., Kim, H. S., **Kim, Y. J.**, Amirkhanian, S., "Characterization of recycled aged polymer modified asphalt binders containing warm mix additives." *The 11th International Symposium for Advanced Technologies in Asphalt Pavements*, Vol. 11, pp. 259-265, Chuncheon, South Korea , June 3-4, 2010.

4) **Yoo-Jae Kim***, Chee-Ho Seo, and Thomas G. Harmon, "Mechanical Properties of Fiber Aerated Lightweight Aggregate Concrete", ConMat'05, Construction Materials: Performance, Innovations and Structural Implications, Vancouver, Canada, August 22-24, 2005.

3) Thomas G. Harmon, **Yoo-Jae Kim*,** "Bond of Surface Mounted FRP Reinforcement for Concrete Structures", International Symposium on Structural Design and Performance Evaluation, Seoul, South Korea, February 12, 2003.

2) Victoria Marie Winn, **Yoo-Jae Kim***, and Thomas G. Harmon, "Confined Reinforced Concrete Columns for Multistory Buildings", International Conference on Tall Building, and Urban Habitat, Seoul, South Korea, February 10, 2003.

1) **Yoo-Jae Kim***, Chi-Ho Seo, "An Experimental Study on the Properties of Insulated Concrete using Artificial Lightweight Aggregate", Conference of the Architectural Institute of Korea. April 1994.

a*. Under Review Refereed Conference Proceedings: (* denotes corresponding author)

b. Non-refereed:
None

4. Abstracts:
None

5. Reports:

8) **Yoo-Jae Kim***, Hu Jiong, Soon-Jae Lee, A. R. Kotwal, and J. W. Dickey, "Synthesis on Geosynthetic Reinforced Steep Slopes," Texas Department of Transportation, May 2016.

7) H. Jiong, **Yoo-Jae Kim**, and S.-J. Lee, "Synthesis on Cost Effectiveness of Extradosed Bridges," Texas Department of Transportation, May 2016.

6) Byoung Hee You, **Yoo-Jae Kim**, and I.-H. Song, "Investigation of acoustic characteristics of a car cabin for the development of nonwoven fabrics as a car interior material (Phase II)," Korea Textile Machinery Research Institute (KOTMI), 2013.

5) Byoung Hee You, **Yoo-Jae Kim**, and I.-H. Song, "Investigation of acoustic characteristics of a car cabin for the development of nonwoven fabrics as a car interior material (Phase I)," Korea Textile Machinery Research Institute (KOTMI), 2012.

4) "Grid Element Tensile Strength Test and Flexural Tests of Scrim Reinforced Concrete Panels", Altusgroup Research Reports No.1.1, Washington University in St. Louis, MO, Aug. 2003-Jan. 2005, Sponsor: Tech-Fab Inc.

3) "Splice Length of C-Grid used for Normal and Lightweight Concrete", Altusgroup Research Report No.2.2., Washington University in St. Louis, MO, Aug. 2003-Jan. 2005, Sponsor: Tech-Fab Inc.

2) "Effect of Temperature on the Reinforcement Value of C-Grid", Altusgroup Research Report No.2.3, Washington University in St. Louis, MO, Aug. 2003-Jan. 2005, Sponsor: Altusgroup.

1) "Strength of C-Grid used for Shear Transfer in Composite Panels", Altusgroup Research Report No.2.4, Washington University in St. Louis, MO, Aug. 2003-Jan. 2005, Sponsor: Altusgroup.

6. Book Reviews:
None

7. Other (Posters):

2) Shishir C. Roy, James Wilde, and **Yoo-Jae Kim***, "Optimization of the Ternary mix design using Gaussian process regression Bayesian optimization algorithm, 2026 Graduate Student Research Conference, Texas State University, April 9th, 2026, San Marcos, TX.

3) **Yoo Jae Kim***, Isaac Sitienei, Araceli Ortiz, Bahram Asiabanpour, and Spencer King, "The Impact of Technical Tours and University Campus Visits Upon Community College Students and their Green Energy Content Knowledge and Attitudes about Environmental Issues and Future Careers: Year 1 deficiencies and Year 2 strategies", San Antonio College, April 22nd, 2016, San Antonio, TX.

1) Bahram Asiabanpour, Semih Aslan, Hassan Salamy, **YooJae Kim**, Jesus Jimenez, Araceli Ortiz, Vishu Viswanathan, Zaid Almusaied, Isaac Sitienei, Kyle Rainosek, and Nicholas Hawkes, "REENERGIZE: Recruitment and Retention of Students in STEM Programs through a Renewable Energy Research and Education Partnership with Five Minority Institutions," San Antonio College, April 22nd, 2016, San Antonio, TX.

B. Works not in Print

1. Papers Presented at Professional Meetings:
None

2. Invited Talks, Lectures, and Presentations:

9) "The Improvement of Fire Resistance Capacity of the Fire Damaged Columns II", Meeram Construction Co., Seoul South Korea, July 19th, 2019

8) "The Improvement of Fire Resistance Capacity of the Fire Damaged Columns I", Meeram Construction Co., Seoul, South Korea, Nov. 30th, 2018.

7) "Fire Damage Assessment of Concrete Filled Steel Tube (CFT) Columns", Korea Institute of Civil Engineering and Building Technology (KICT), Hwaseong-si, South Korea, August 3rd, 2018

6) "Pumpability of Fiber Reinforced Self Consolidating Concrete" Koroy Ready Mixed Concrete Co. Cheonan, South Korea, August 3rd, 2017.

5) "Behavior of Carbon Fiber Reinforced Double Tee" Korea Institute of Construction Technology (KICT), Ilsan, South Korea, December 21, 2016.

4) "Composite Insulated Precast Wall Panels with Shear Transfer Provided By Carbon Fiber Grid", Korea Institute of Construction Technology (KICT), Ilsan, South Korea, July 7th and July 24th, 2015.

3) "Development of new deflection model for Carbon Fiber Reinforced Sandwich Panel", Korea Institute of Construction Technology (KICT), Ilsan, South Korea, May 2nd, 2014.

2) "Composite Insulated Wall Panels with Shear Transfer Provided By Carbon Fiber Grid" Korea Institute of Construction Technology (KICT), Ilsan, South Korea, July 24, 2013.

1) "Behavior of Aerated Lightweight Aggregate Concrete Including the Effect of Confinement" Kon-Kuk University, South Korea, December 16, 2004.

3. Consultancies:

1) "Technical Manual for CarbonCast™ Architectural Panels" Kenneth Baur, Thomas G. Harmon, **Yoo-Jae Kim**, and Matthew Krick, Altusgroup, January 2006.

4. Workshops:
None

5. Other:
None

C. Grants and Contracts

1. Funded External Grants and Contracts:

19) Meeram Construction Co., 2022, PI, "The Development of AI-Based Self-Driving Disaster Vulnerable Personal Evacuation Device", Amount: $4,000, April 1, 2022 – June 31, 2023.

18) Korea Agency for Infrastructure Technology Advancement (KAIA), 2019, CoPI, "Development of IoT-based Asphalt Pavement Quality Control Technology", Amount: $88,574, April 2019 – December 2021.

17) Meeram Construction Co., 2019, PI, "Fire Damaged Concrete Column Restoration", Amount: $5,275, March 1, 2019 – April 30, 2020.

16) CIM Patron, 2018, PI, "The Effect of Ground Granulated Blast Furnace Slag on Mechanical Properties of High Strength Concrete", Amount: $6,000, May 3, 2018 – Nov. 30, 2019.

15) CIM Patron, 2018, CoPI, "Mechanical and Durability of High Strength Concrete Made with Spent Foundry Sand", Amount: $50,000. May3 2018 – August 30, 2019.

14) U.S. Department of Education, CoPI, "REENERGIZE: Attraction, Recruitment and Retention of Students in STEM Programs through Renewable Energy Research and Education Partnership with Five Minority-Serving Institutions" MSEIP Program, Amount: $613,822, September 2014 – December 2017.

13) TxDOT, 2014, CoPI, "Improved Crack Sealant Application Methods", Amount: $229,640, September 2014 – August 2017.

12) Capitol Aggregates, 2014, PI, "Concrete Based on Portland Limestone Cement with Limestone Content Greater Than 15%", Amount: $30,000, June 2014 – Dec 2015.

11) THECB-ESP, 2014, CoPI, "Designing Green-Engineering Summer Camp", Amount: $12,500, July 8-14, 2014.

10) KEPCO-Plant Service & Engineering (KEPCO-KPS), 2013, CoPI, "Assembly tolerance analysis for the development of gas turbine rotor stacking software", Amount: $70,000 March 2013 – September 2014.

9) Korea Institute of Construction Technology (KICT), 2013, CoPI, "Development of Low-Carbon Low-Cost Asphalt Pavement: Evaluation of New Additive for Crumb Rubber Modified Asphalt Binders, Amount: $19,355, February 2013 – November 2013.

8) TxDOT, 2012, PI, "Synthesis on Geosynthetic-Reinforced Steep Slopes (0-6792)", Amount: $49,995.

7) TxDOT, 2012, CoPI, "Feasibility Study of Two-lift Concrete Paving (0-6749)", Amount: $136,947.

6) Korea Textile Machinery Research Institute (KOTMI), 2012, CoPI, Investigation of acoustic characteristics of a car cabin for the development of nonwoven fabrics as a car interior material (Phase II)," Amount: $25,797.

5) Pittsburgh Flexicore, 2011, PI, "Review of Quality System Manual (QSM) for Precast/Prestressed Concrete: PCI Level II", Amount: $6,000.

4) Korea Textile Machinery Research Institute (KOTMI), 2011, CoPI, "Investigation of Acoustic Characteristics of Car Cabin for the Development of Nonwoven Fabrics as a Car Interior Material", Amount: $27,000.

3) TxDOT, 2011, CoPI, "Synthesis on Cost Effectiveness of Extradosed Bridges", Amount: $49,984.

2) TxDOT, 2011, CoPI, "Costs Associated with Conversion of Surfaced Roads to Un-surfaced Roads", Amount: $118,112.

1) TxDOT, 2010, CoPI, "Synthesis of Microsurfacing Successes and Failures", Amount: $49,931.

1*. Working on and Under Review External Grants and Contracts:

2. Submitted, but not Funded, External Grants and Contracts:

29) Concrete Advancement Foundation, 2025, "Transforming 3D Printing Technology: Direct Utilization of Ready-Mix", Amount: $80,000. (Submitted Conceptual Proposal on Jan. 6th, 2025)

28) Department of Defense, "Advancing Innovation in Construction: Acquiring 3D Concrete Printer Systems for Texas State University", September 15, 2023. Amount: $641,050.

27) National Renewable Energy Laboratory, Golden, CO. 2023, "Precast UHPC Barriers for Protecting Transformers at the Electricity Substation", March 26, 2023. Amount: $100,000.

26) NEx (An ACI Center of Excellence for Nonmetallica Building Materials), "Optimizing Dispersion for Enhanced Sustainability and Durability of Fiber-Reinforced Concrete (FRC) with Nanomaterials", May 15, 2023 Amount: $94,995.

25) Arkansas Department of Transportation, "Optimizing Dispersion for Enhanced Sustainability and Durability of Fiber Reinforced Concrete (FRC) Pavements with Nanomaterials", June 26, 2023. Amount: $199,999.

24) Minister of Land, Infrastructure and Transport of the Republic of Korea, 2023, PI, "Rapid fire prediction and response Technology- Design of Fire and blast load resisting concrete material and application to the structural member", Korea Institute of Civil and construction Technology, Hwaseong, South Korea, Amount: $100,000.

23) Minnesota Concrete Council, "Introduction of Concrete Fire damage assessment methods and Techniques for CIM students", Minnesota Concrete Council Grant Program. Amount: $1,000.

22) TxDOT, 2021, CoPI, "Investigating Prime versus Curing: Where, When, and Why (21-28)", Amount: $509,250.

21) NSF, 2018, CoPI, "MRI: Acquisition of a Large Capacity, High Shear Pan Mixer for Sustainable, High-Performance and Ultra-High Performance Concrete", Amount: $129,829.

20) TxDOT, 2018, PI, "Synthesis of Precast Column Designs for Texas Bridges (19-11)", Amount: $65,000.

19) TxDOT, 2018, CoPI, "Update Seal Coat Application Rate Design Method (19-157)", Amount: $243,100.

18) TxDOT, 2018, CoPI, "Utilization of UPHC Superstructures in Texas (19-44)", Amount: $575,779.30.

17) TxDOT, 2017, CoPI, "Establishing Best Practices for Construction and Design of Cement Treated Materials", Amount: $559,900, January 2018 – August 2021.

16) Texas Department of Transportation (TxDOT), 2015, CoPI "Comparative Analysis of Tack Coat, Underseal Membrane, and Underseal Technologies", Amount: $481,140, January 2016 – August 2020.

15) National Science Foundation (NSF), 2015, Senior Personnel, Improving Undergraduate STEM Education (IUSE)", Amount: $400,000, September 2016 – August 2018.

14) TxDOT, 2016, CoPI, ""Audible Lane Departure Warning for Seal Coat Surfaces", Amount: $335,646, September 2015 – August 2018.

13) TxDOT, 2015, PI, "Evaluating Limestone Cements Containing > 15% Limestone (15-85)", Amount: $124,100.

12) TxDOT, 2015, CoPI, "Validation of RAP and/or RAS in Hydraulic Cement Concrete (15-36)", Amount: $120,286.

11) TxDOT, 2015, CoPI, "Sustainable Perpetual Asphalt Pavements and Comparative Analysis of Lifecycle Cost to traditional 20 year pavement design (15-70)", Amount: $113,210.

10) TxDOT, 2014, PI, "Synthesis: Evaluating Limestone Cements Containing > 15% Limestone (14-11)", Amount: $49,575.

9) TxDOT, 2014, CoPI, "Optimize Use and Performance of Cape Seals (14-24)", Amount: $127,104.

8) Environmental Research & Education Foundation, "Technical and Economic Feasibility Study of Using Recycled Concrete Aggregate in Producing High Performance Concrete" Amount: $169,649.

7) NSF, 2012, Senior Investigator, "Semi-Arid Regional Alliance for Sustainable Building and Construction (SARAS B&C)", Amount: $2,000,000.

6) TxDOT, 2011, PI, "Synthesis Study of Traffic Signal Systems", Amount: $49,995.

5) TxDOT, 2011, CoPI, "Evaluation of Bonus/Penalty Pay Adjustment Systems for HMA and Ride Specifications of Concrete and Asphalt Pavements", Amount: $229,382.

4) TxDOT, 2010, CoPI, "Evaluate Binder and Mixture Aging for Warm Mix Asphalt", Amount: $361,099.

3) TxDOT, 2010, CoPI, "Synthesis of Best Practices for the Placement of Long and Short Patches for Ride Quality", Amount: $49,635.

2) TxDOT, 2012, CoPI, "Study of Short-Term Skid Improvements by Light Texturing with a Milling Machine (0-6752)", Amount: $324,362.

1) TxDOT, 2012, CoPI, "Seal Coat Quality: Does Low Cost Mean Low Quality? (0-6747)", Amount: $294,230.

3. Funded Internal Grants and Contracts:

9) Honorary Professor International Studies Research Grant, "Center for International Studies at Texas State University", Amount: $500, SP 2025, Grant.

8) Texas State REP, 2024, PI, "Carbon Fiber Grid Composite Insulated Wall Panels - Differential Equation Method for Computing Deflection, Moments, and Shears", Office of Sponsored Programs (OSP), Texas State University, San Marcos, TX. Amount: $6,086

7) Honorary Professor International Studies Research Grant, “Center for International Studies at Texas State University”, Amount: $500, SP 2023, Grant.

6) Texas State OSP, 2022 CoPI, "Acquisition of a flexural fixture for Instron 5989 Test Instrument," Office of Sponsored Programs (OSP) by Texas State University, $59,848.00, Funded: November 2022. Grant

5) Texas State REP, 2019, PI, “Ternary Mix Design for Concrete containing Ground Granulated Blast Furnace Slag and Limestone Powder”, Office of Sponsored Programs (OSP), Texas State University, San Marcos, TX. Amount: $8,000.

4) Texas State REP, 2017, PI, “The Effects of Limestone Powder Particle Size on the Mechanical Properties and the Life Cycle Assessment of Concrete”, Office of Sponsored Programs (OSP), Texas State University, San Marcos, TX. Amount: $8,000.

3) Texas State REP, 2015, CoPI, “Feasibility Study of Using Micro-and Nano-Clay as Additives in concrete”, Office of Sponsored Programs (OSP), Texas State University, San Marcos, TX. Amount: $8,160.

2) Texas State REP, 2013, PI, “Development of Sustainable Concrete with Recycled Carpet Fiber Reinforcement and Recycled Concrete Aggregate”, Office of Sponsored Programs (OSP), Texas State University-San Marcos, TX. Amount: $16,000.

1) Texas State REP, 2010, PI, “Performance Properties and Prediction Models of Low-Energy and Low Carbon-dioxide Polymerized Binders”, Office of Sponsored Programs (OSP), Texas State University-San Marcos, TX. Amount: $8,000.

3*. Working on and Under Review Internal Grants and Contracts:

4. Submitted, but not Funded, Internal Grants and Contracts:

1) Texas State One-Time Research Support from the Associate Vice President for Research, CoPI, “Development of Large Area Injection Molding Capability for Biomedical Micro- and Nanosystems”, Texas State University-San Marcos, TX. Amount: $150,000.

D. Fellowships, Awards, Honors:

5) National Precast Concrete Association, Student Competition, “Two new “Load and Go” concrete mixer truck washing stations”, 3rd Place winner in the national level. (Feb. 6th, 2026)

4) National Precast Concrete Association, Student Competition, “Marine Facilities Precast Breasting and Mooring Dolphins”, 1st Place winner in the national level. (Feb. 6th, 2025)

3) Editor’s Choice Paper selected by Materials Journal, Title: “Analytical Model of Two-Directional Cracking Shear-Friction Membrane for Finite Element Analysis of Reinforced Concrete” as Corresponding Author, MDPI, 2021

2) Leslie D., Marin Award of Merit to Dr. Yoo-Jae Kim by Precast/Prestressed Concrete Institute (PCI),

1) ACI Fall 2012 Egg Protection Device (October 21, 2012), what students won the 3rd place in the Durability category. This is a worldwide competition held annually by the American Concrete Institute.

IV. SERVICE

A. Institutional

1. University:

- Serving as a member of Library Partners Committee (2024 – present)
- Attending annual graduation commencement ceremonies (2009 - present)
- Serving as Faculty Senate Liaison, University Council (September 2017 - Aug 2019)
- Serving as Suspension Appeals Committee member, University Council (2014 -2018)
- Attending Suspension Appeal Committee meeting, May 31st, 2016
- Serving as a marshal for graduation commencement ceremony (Aug. 2013)
- Attending Homecoming Tailgating (2009 - present)
- Coordinating MOU between Texas State University – Korea Textile Machinery Research Institute (KOTMI) (2012)

2. College:

- Serving as the Alternate College Review Group for Tenure and Promotion (2024 - Present)
- Serving as a member of the graduate faculty (2009 - present)
- Serving as the College Review Group for Tenure and Promotion (2020 - 2023)
- Serving as the Civil Engineering search committee member for the position of Assistant professor in Infrastructure Material Engineering (September 2019-SU 2020)
- Serving as the Civil Engineering search committee member for the position of Associate professor in Geotechnical Engineering (Jan. 2018-August 2018)
- Serving as the Civil Engineering search committee member for the position of Associate professor in Environmental/Water Resources (Jan. 2018- August 2018)
- Serving as CoSE undergraduate Scholarship Committee (September 2017- May 2018)
- Serving as Instructor for Renewable Energy Research & Education Training Program at Texas State University (May 18 - 22, 2015, May 16 -20, 2016, and May 15-19, 2017)
- Serving as a Core Faculty for Material Science, Engineering, and Commercialization Program (Feb 14th 2014 - Dec 31st 2018)
- Serving as Ingram Endowed Chair search committee member for School of Engineering Civil and Environmental Engineering (2016)
- Serving as an instructor for Green Design Summer Camp (July 8th 2014 - July 15 2014)
- Serving as a Structural Engineer for load capacity evaluation of concrete slab at Mitte2322 for Optical Tables (Jan 16th - Feb 11th 2013)
- Serving as an Adjunct Faculty for Material Science, Engineering, and Commercialization Program
- Attending MSEC curriculum meetings (2010)

3. Department/School:

- Serving as Undergraduate Advisor for National Precast Concrete Institute Student Competition (Sept. 2025 – Feb. 2026)
- Student Advisor for ACI Student Chapter Field Trip (17 CIM Students), Locke Solutions, Houston, TX, Nov. 14th, 2025

- Serving as search committee member for CIM professor of Practice position (SP, FL 2025)
- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting, Precast Show at Indianapolis, IN (Feb 5th -7th, 2025)
- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting, Chicago, IL (September 17th - 18th, 2025)
- Serving as Undergraduate Advisor for National Precast Concrete Institute Student Competition (Sept. 2025 – Feb. 2026, Sept. 2024 – Feb. 2025, and Sept. 2023-Feb. 2024)
- Serving as an evaluator for In-Class observation for Dr. Gaill, J Brian (Sept. 23th, 2025)
- Serving as an evaluator for In-Class observation for Dr. Guo Xingzhou (Sept. 26th, 2025)
- Serving as an evaluator for In-Class observation for Dr. Moro Martinez, Carlos (Sept. 24th, 2025, Oct 25th, 2024, Sept 7th, 2022)
- Attending CIM patron's meeting (Sept.11th, 2025, Sept. 19th, 2024, November 29th, 2012, January 29th, 2015, September 14th, 2016, Oct. 26th, 2017)
- Leader of Family Campaign (Feb. 2022 - Present)
- Committee member for Construction Management Graduate Program Admission (March 2022 - present)
- Chair of the Departmental Undergraduate Scholarship Committee (Nov. 2015 - present)
- Library Representative for the Department of Engineering Technology (2017 - present)
- Serving as representative Bobcat Day (2009 - present)
- Coordinator of CIM Senior Exit Survey (2016 - 2025)
- Coordinator of CIM Alumni Survey (2016 - 2025)
- Coordinator of CIM Employer Survey (2017 - 2025)
- Serving as Department Personnel Committee Chair for Full Professor (Feb. 2020 – Feb. 2024)
- Chair of CIM Scholarship Committee (Aug. 2016 – Aug.2024)
- Chair of search committee member for CIM Director Position (FL 2019 to SP 2020 and FL 2020, SP2022, and SU2022)
- Serving as search committee member for CIM Recruiter position (SP 2023)
- Committee member for CIM Assistant Professor position (FL 2021)
- Attending ASCE Wind load Committee meeting, Virtual, Feb. 16, 2021
- Attending NSC Meeting, Virtual, Feb. 18, 2021
- Attending PCI Seismic Committee meeting, Virtual, Feb. 18, 2021
- Serving as an evaluator for In-Class observation for Dr. Meysam Khaleghian (Sept 25th, 2020)
- Serving as an evaluator for In-Class observation for Dr. Aguayo Fred (September 15th, 2020)
- Serving as a member of Master program Committee for Construction Management (2017 - 2020)
- Serving as Chair of search committee member for CIM Director Position (FL 2019)
- Serving as Acting CIM program Director, (Jan 15th - May 15th, 2019)
- Attending American Concrete Institute (ACI) Convention at Québec City, Québec, CA (March 22-26th, 2019)
- Attending American Society of Concrete Contractors (ASCC) Conference at Chicago, IL (September 19-21st, 2019)
- Serving as search committee member for CIM Recruiter position (SP 2019)
- Serving as search committee member for CIM Director position (SP 2019)
- Serving as CIM representative for CCMR Summit at ESC20, San Antonio, TX (Feb 9th, 2019)

- Serving as CIM representative for Build Learn Advance Program on Campus (Jan 2019)
- Attending American Society of Concrete Contractors (ASCC) Conference at Charlotte, NC (September 20-22nd, 2018)
- Serving as CIM representative for Career Fair in Pearsall High School, Pearsall, TX (March 9th, 2018)
- Serving as search committee Chair for Senior Lab Technician position (FL 2016-SP 2017)
- Serving as Acting CIM program Director, developed 5-year Strategic plan (September - December 2016)
- Serving as a Research Enhancement Program Committee for Department (Sept - Dec 2015 and Sept. - Dec. 2017)
- Serving as an Alternate Personnel Committee Representative to the College Review Group (Sept. 2017 - Dec 2017)
- Attending CIM NSC Meeting October 26th - 27th 2017
- Attending International Seminar on the Status and Tasks of Structural Fire Resistance Design for Performance-Based Fire Safety Design among Korea, Japan and Hong Kong at Seoul, South Korea (Jan. 10th, 2017)
- Serving as CIM interim director for 2017-2023 strategic plan (FL 2016)
- Serving as search committee member for CIM Director position (FL 2016)
- Serving as search committee member for CIM Assistant Professor position (SP 2016)
- Serving as senior member of In-Class Observation. (March 21, 2016)
- Serving as Student Advisor for Precast/Prestressed Concrete Institute Convention and National Bridge Conference Student Poster at Nashville, TN (March 4th, 2016), Awarded $500 Travel grant.
- Serving as a personnel committee for Dr. Song's tenure and Promotion to Associate Professor
- Serving as search committee member for CIM Assistant/Associate Professor position (Aug. 2015-May 2016)
- Serving as Student Advisor for 9th Annual Undergraduate Research Conference and Honors Thesis Forum at Texas State University, San Marcos, TX (April 24th, 2015) http://www.txstate.edu/honors/involvement/events/urc/2015-schedule.html
- Serving as Student Advisor for 2013 College of Science Research Conference for CIM Students at University of Texas at San Antonio, TX (Oct. 18th, 2013)
- Serving as search committee member for CIM Director position (2013)
- Serving as Undergraduate Marshal for the graduation ceremony Summer 2013
- Serving as Faculty member for CIM Accreditation June 5th -7th, 2013
- Serving as Student Advisor for ACI Egg Protection Device (EPD) Competition for CIM Students at Toronto, Canada (Oct. 20th - 23rd, 2012)
- Serving as search committee member for CIM Director and Assistant Professor position (2012)
- Serving as search committee member for CM Assistant/Associate Professor position (2011)
- Serving as an advisor for Associated Builders and Contractors, Inc (2010-2011)
- Serving as an Alternate Personnel Committee Representative to the College Review Group (Oct. 2015 -Oct. 2016)
- Serving as Student Advisor for ACI FRP Composites Competition for CIM Students at Minneapolis, MN (April 11th, 2013)
- Attending ICRI NTX Mega Demo Day at Lewisville, TX (April 14th, 2023)
- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting, Precast Show at Columbus, OH (Feb 21st -24th, 2023)
- Attending PCMA at San Antonio, TX (Feb 19th, 2016)

- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting at Nashville, TN (Oct 3-6th, 2017)
- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting at Cleveland, OH (March 2-4th, 2017)
- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting at Nashville, TN (March 2-4th, 2016)
- Attending Precast/Prestressed Concrete Institute (PCI) Industry Handbook Committee Meeting at Chicago, IL (August 24 - 26th, 2016)
- Attending National Precast Concrete Association (NPCA) Conference at Minneapolis, MN (October 22-23rd, 2015)
- Attending Precast/Prestressed Concrete Institute (PCI) Committee Meeting at Louisville, KY (October 14-15th, 2015)
- Attending CIM NSC Meeting October 7th, 2015
- Attending American Society of Concrete Contractors (ASCC) Conference at Dallas, TX (September 24-25th, 2015)
- Participating in Major Fair Day (September 23rd, 2015)
- Attending Precast/Prestressed Concrete Institute Committee Meeting at Chicago, IL (April 30th - May 1st, 2015)
- Attending Precast Show and PCI Convention with CIM Student at Orlando, FL (March 4th - 6th, 2015)
- Attending Portland Cement Association (PCA) Professor's Workshop at Skokie, IL (July 21 - 25th, 2014)
- Attending PCI Fall Convention with six CIM Students at Grapevine, TX (September 23rd - 24th, 2013)
- Attending CIM NSC Meeting June 7th, 2013
- Attending NRMCA Annual Convention with CIM Students at San Antonio, TX (March 4th, 2013)
- Attending World of Concrete (January 19-21, 2011, January 25-27, 2012, February 6-8th, 2013, January 22-24, 2014)
- Participation in CIM Concrete Lab Open House (Feb 28th, 2012)
- Participating in CIM Concrete Décor Show at San Antonio, TX (Feb 20th and 24th, 2012)
- Participating in ACI San Antonio Chapter Meeting (Dec 9th, 2011)
- Participating in CIM Patron Social (Oct 17th, and Dec 5th, 2011)
- Participating in CIM Exhibition at PCI Convention at Salt Lake City, UT (Oct19th - 24th, 2011)
- Participating in NSC meeting at MTSU (May4th - 6th, 2011)
- Participating in CSA meeting (2009 - 2019)
- Participating in CIM meeting (2009 - present)
- Participating in the Concrete Management and Construction Management Job Fair (2009-present)
- Participating in the Construction Mixer (2009-2010)

B. Professional:

- Serving as a Session Chair of New Construction Materials Session 2 for CECAR10 Conference (Oct. 22, 2025)
- TxDOT TAP5 Committee Member (2012 – present)
- Editorial Board (2023 - present)
  - Journal Topic Editor for Construction Materials at MDPI,

- https://www.mdpi.com/journal/constrmater/topic_editors

- Editorial Board (2012 – *present)*

  - Editorial board member for the Inventi Rapid Structure & Design Journal.

- Seismic Committee Voting Member of Precast/Prestressed Concrete Institute *(2004* – present)
- Design handbook Committee Voting Member of Precast/Prestressed Concrete Institute *(2010* – Nov. 2018)
- ASCE07-22 Seismic Load Subcommittee Associate Voting Member (Nov. 2017 – July 2023)
- ASCE07-22 Wind Load Subcommittee Associate Voting Member (Nov. 2017 – July 2023)
- ASCE07-22 Minimum Design Loads and Associated Criteria for Buildings and Other Structures Main Committee Associate Voting Member (Nov. 2017 – July 2023)
- ASCE07-28 Seismic Load Subcommittee Associate Voting Member (May 2023 – present)
- ASCE07-28 Minimum Design Loads and Associated Criteria for Buildings and Other Structures Main Committee Associate Voting Member (May 2023 – present)

- Journal Reviewer (2010 – present)

  - Journal of Architectural Engineering, ASCE

  - Canadian Journal of Civil Engineering

  - Precast/Prestressed Concrete Institute Journal.

  - Materials and Structures Journal
  - Materials Journal
  - Applied Science Journal

C. Community:

- Texas Ramp Project at Buda, TX (December 15th, 2012)
- Allan Woods Community Project (April 29th, 2011)
- Serving as a Chair of Austin Korean-Asian American Students' Scholarship Committee in Austin, TX (January 1, 2013 – June 30, 2015)
- National Unification Advisory Council for the President of Republic of Korea, Seoul, South Korea (July 1, 2013 – June 30, 2015)

D. Organizations

1. Honorary:
- Honorary Professor of International Studies awarded by the Center for International Studies Texas State University
- Chi Epsilon, the national honor society of Civil Engineers, 2003

2. Professional:
- Member of American Concrete Institute
- Member of American Society of Civil Engineers
- Member of Precast/Prestressed Concrete Institute