



CURRICULUM VITA

Jaeheum Yeon, Ph.D.

Assistant Professor
Construction Engineering Program
Department of Engineering and Technology
College of Science and Engineering
Texas A&M University-Commerce
Commerce, Texas 75429

EDUCATION

Ph. D. Texas A&M University, College Station, Texas (May 2017)

Department of Architecture

College of Architecture

Expertise: Construction Management

Supervisors: Dr. Julian H. Kang and Dr. Wei Yan

Dissertation: Rapid Concrete Pavement Spall Repair using 3D Scanning and 3D Printing Technologies

M.S. Texas A&M University, College Station, Texas (December 2012)

Zachry Department of Civil Engineering

Dwight Look College of Engineering

Expertise: Construction Engineering and Management

Supervisor: Dr. John A. Walewski

Thesis: Risk Framework for the Next Generation Nuclear Power Plant Construction

M.S. Hanyang University, Seoul, South Korea (February 2008)

Department of Civil Engineering

Expertise: Structural Engineering

Supervisor: Dr. Taehyo Park

Thesis: Numerical Analysis and Experimental Analysis for the Steel-Concrete Composite Bridge Deck

B.S. Konkuk University, Seoul, South Korea (February 2006)

Department of Rural Engineering

College of Agriculture and Life Sciences

[Current: Civil and Environmental Engineering]

College of Engineering

PROFESSIONAL EXPERIENCE

Assistant Professor (Aug. 2017 – Present)

Department of Engineering and Technology, Texas A&M University-Commerce

[CONE 321] Construction Estimating*

[CONE 422] Construction Project Management*

[CONE 441] Highway and Heavy Construction*

[ENGR 2303] Engineering Mechanics*

[TMGT 454] Contracts and Specifications

[CONE 322] Construction Planning and Scheduling*

[CONE 351] Surveying for Construction*

[CONE 431] Sustainable Construction Methods and Processes*

[TMGT 335] Construction and LEED Systems

[CONE 321] Construction Estimating

[ENGR 110] Introduction to Engineering & Technology

[ENGR 210] Engineering Mechanics

[TMGT 454] Contracts and Specifications

Ad-Interim Instructor (Jan. 2017 – May 2017)

Department of Engineering and Technology, Texas A&M University-Commerce

[CONE 212] Dynamics

[CONE 431] Sustainable Construction Methods and Processes

[TMGT 335] Construction and LEED System

[TMGT 439] Construction Management

Graduate Assistant Teaching (Instructor) (Aug. 2016 – Dec 2016)
Department of Construction Science, Texas A&M University
[COSC 175] Construction Graphics

Graduate Research Assistant (Jan. 2015 – May 2017)
Department of Construction Science, Texas A&M University
Creative Construction Laboratory

Graduate Research Assistant (Mar. 2006 – Feb. 2008)
Department of Civil Engineering, Hanyang University, Seoul, South Korea
Computational Solid & Structural Mechanics Laboratory

Graduate Teaching Assistant (Jan 2014 – May 2015)
Department of Construction Science, Texas A&M University

Graduate Teaching Assistant (Mar 2006 – Dec 2006)
Department of Civil Engineering, Hanyang University, Seoul, South Korea

Research Member

Department of Construction Science, Texas A&M University
[Jan. 2013 – May 2017] Creative Construction Laboratory, Director: Dr. Julian Kang,

Department of Architecture, Texas A&M University
[Jan. 2014 – May 2017] Building Information Modeling and Simulation Group,
Director: Dr. Wei Yan and Dr. Mark J. Clayton, Department of Civil Engineering,

Hanyang University, Seoul, South Korea
[Mar. 2006 – Feb. 2008] Computational Solid & Structural Mechanics Laboratory,
Director: Dr. Taehyo Park

Department of Agricultural Engineering, Konkuk University, Seoul, South Korea
[Aug. 2005 – Dec. 2005] Environmental Hydraulic Engineering Laboratory,
Director: Dr. Sunjoo Kim

A. Journal Articles (*Corresponding Author)

1. Kim, K., ***Yeon, J.**, Lee, H., Yeon, J.H. (2019) “Dimensional-Stability of SBR-Modified Cementitious Mixtures for 3D Additive Construction”, Applied Sciences, Multidisciplinary Digital Publishing Institute, Vol. 9(16), 3386; <https://doi.org/10.3390/app9163386>. (ISSN: 2076-3417; Q1, Science Citation Index Expanded, 2018 Impact Factor – 2.217, H Index – 23).
2. Yeon, K., Kim, K., ***Yeon, J.**, Lee, H. (2019) “Compressive and Flexural Strengths of EVA-Modified Cementitious Mixtures for 3D Concrete Printing”, Materials, Multidisciplinary Digital Publishing Institute, Vol. 12(16), 2600 (ISSN: 1996-1944; Q2, Science Citation Index Expanded, 2018 Impact Factor – 2.972, H Index – 83). <https://doi.org/10.3390/ma12162600>
3. Urgessa, G., Yun, K., **Yeon, J.**, *Yeon, J.H. (2019) “Thermal Responses of Concrete Slabs Containing Microencapsulated Low-Transition Temperature Phase Change Materials Exposed to Realistic Climate Conditions”, Cement and Concrete Composites, Elsevier BV, Vol. 104, 103391 (ISSN: 0958-9465; Q1, Science Citation Index Expanded, 2018 Impact Factor – 5.172, H Index – 122). <https://doi.org/10.1016/j.cemconcomp.2019.103391> (Published on August - Online, Will be Published on November - Journal)
4. Kim, K., ***Yeon, J.**, Lee, H., Yeon, K. (2019) “Feasibility Study of SBR-Modified Cementitious Mixtures for Use as 3D Additive Construction Materials”, Polymers, Multidisciplinary Digital Publishing Institute, Vol.11(8), 1321 (ISSN: 2073-4360; Q1, Science Citation Index Expanded, 2018 Impact Factor – 3.164, H Index – 53). <https://doi.org/10.3390/polym11081321>
5. Kim, K., ***Yeon, J.**, Lee, H., Yeon, K. (2019) “Strength Development Characteristics of SBR-Modified Cementitious Mixtures for 3-Demensional Concrete Printing”, Sustainability, Multidisciplinary Digital Publishing Institute, Vol. 11(15), 4164. (ISSN: 2071-1050; Q2, Science Citation Index Expanded, Social Sciences Citation Index, 2018 Impact Factor – 2.592, H Index – 53). <https://doi.org/10.3390/su11154164>
6. ***Yeon, J.**, Song, Y., Kim, K., Kang, J. (2019) “Effects of Epoxy Adhesive Layer Thickness on Bond Strength of Joints in Concrete Structures”, Materials,

Multidisciplinary Digital Publishing Institute, Vol. 12(15), 2396. (ISSN: 1996-1944; Q2, Science Citation Index Expanded, 2018 Impact Factor – 2.972, H Index – 83). <https://doi.org/10.3390/ma12152396>

7. Yeon, K., Kim, K., ***Yeon, J.**, Lee, H. (2019) “Fresh Properties of EVA-Modified Cementitious Mixtures for Use in Additive Construction by Extrusion”, Materials, Multidisciplinary Digital Publishing Institute, Vol. 12(14), 2292 (ISSN: 1996-1944; Q2, Science Citation Index Expanded, 2018 Impact Factor – 2.972, H Index – 83) <https://doi.org/10.3390/ma12142292>
8. ***Yeon, J.**, Czarny, M., Walewski, J., Kang, J. (2019) “Conceptual Big Data Case Study to Identifying Risks of New Nuclear Technologies”, International Structural Engineering and Construction, The ISEC Society + ISEC Press, Article ID-RAD-11. (ISBN: 978-0-9960437-6-2; Scopus) <https://doi.org/10.14455/ISEC.res.2019.49>
9. ***Yeon, J.**, Kang, J., Yan, W. (2018) “Spall Damage Repair using 3D Printing Technology”, Automation in Construction, Elsevier BV, Vol. 89 266-274. (ISSN: 0926-5805 Q1, Science Citation Index Expanded, 2018 Impact Factor – 4.313; H Index – 95) <https://doi.org/10.1016/j.autcon.2018.02.003>
10. Jin, N., ***Yeon, J.**, Min, S., Yeon, K. (2018) “Strength Developments and Deformation Characteristics of MMA-Modified Vinyl Ester Polymer Concrete”, International Journal of Concrete Structures and Materials, Springer Science + Business Media, Vol. 12(4) 65-76. (ISSN: 1976-0485; Q1, Science Citation Index Expanded, 2018 Impact Factor: 2.111; H Index – 20) <https://doi.org/10.1186/s40069-018-0232-0>
11. ***Yeon, J.** and Kang, J. (2017) “Spall Repair using a 3D Printer and Epoxy Resin Adhesive”, International Structural Engineering and Construction, The ISEC Society + ISEC Press, Article ID I-16. (ISBN: 978-0-9960437-4-8; Scopus) <https://doi.org/10.14455/ISEC.res.2017.213>
12. Jin, N., ***Yeon, J.**, Seung, I., Yeon, K. (2017). “Effects of Curing Temperature and Hardener Type on the Mechanical Properties of Bisphenol F-Type Epoxy Resin Concrete”, Journal of Construction and Building Materials, Elsevier BV, Vol. 156, 933-943. (ISSN: 0950-0618; Q1, Science Citation Index Expanded, 2018 Impact

Factor: 4.046; H Index – 129)
<https://doi.org/10.1016/j.conbuildmat.2017.09.053>

13. Jin, N., Yeon, K., Min, S., ***Yeon, J.** (2017). “Using the Maturity Method in Predicting the Compressive Strength of Vinyl Ester Polymer Concrete at an Early Age”, *Journal of Advances in Materials Science and Engineering*, Hindawi Publishing Corporation, Vol. 2017, 4546732, 12 pages. (ISSN: 1687-8442; Q2, Science Citation Index Expanded, 2018 Impact Factor: 1.399; H Index – 26) <https://doi.org/10.1155/2017/4546732>
14. Jin, N., Seung, I., Choi, Y., ***Yeon, J.** (2017) “Prediction of Early-Age Compressive Strength of Epoxy Resin Concrete using the Maturity Method”, *Journal of Construction and Building Materials*, Elsevier BV, Vol. 152, 990-998. (ISSN: 0950-0618; Q1, Science Citation Index Expanded, 2018 Impact Factor: 4.046; H Index – 129) <https://doi.org/10.1016/j.conbuildmat.2017.07.066>
15. Yeon, K., Kim, K., Kim, C., ***Yeon, J.** (2015) “Coefficient of Thermal Expansion of Polymer Concrete with Different Polymeric Binders”, *Advanced Materials Research*, Trans Tech Publications, Vol. 1129: 139-144. (ISSN: 1662-8985; Scopus) <https://doi.org/10.4028/www.scientific.net/AMR.1129.139>
16. Yeon, K., Kim, K., Kim, C., ***Yeon, J.** (2015) “Comparative Study on the Elastic Modulus of Polymer Concrete”, *Advanced Materials Research*, Trans Tech Publications, Vol. 1129: 145-150. (ISSN: 1662-8985; Scopus) <https://doi.org/10.4028/www.scientific.net/AMR.1129.145>

B. Conference Proceedings

1. Kang, J., **Yeon, J.** (2019) “Teaching How to read 2D Drawings using Virtual Construction”, *EDULEARN 19: 11th International Conference on Education and New Learning Technologies*, Palma, Spain, June 30-July 2. (ISSN: 2340-1117; Conference Proceedings Citation Index) <https://doi.org/10.21125/edulearn.2019.1881>
2. Aydin, B., **Yeon, J.**, Oh, I. (2019) “A Pilot Study of UAVs in the Construction Sector: Knowledge, Attitudes, and Practice”, *IISE 2019: The Institute of*

Industrial and Systems Engineers Annual Conference & Expo, Orlando, Florida, USA, May 18-21.

3. **Yeon, J.**, Rew, Y., Kang, J., Choi, K. (2018) “Life-Cycle Assessment based Feasibility Study of Spall Damage Rehabilitation using 3D Printing Technology”, ASC 2018: 54th International Conference Associated Schools of Construction, Minneapolis, Minnesota, USA, April 18-21.
4. Yeon, K., Kim, K., **Yeon, J.** (2018) “Feasibility Study of the Use of Polymer-Modified Cement Composites as 3D Concrete Printing Material”, ICPIC 2018: 16th International Congress on Polymers in Concrete, Washington D.C., USA, April 29- May 1.
5. **Yeon, J.** and Kang, J. (2017) “Investigation of the Structural Stability of Rapid Spall Repair Method using 3D Printing Technology”, International Conference on Maintenance and Rehabilitation of Constructed Infrastructure Facilities, Seoul, South Korea, Jul. 19–21.
6. **Yeon, J.** and Kang, J. (2017) “Spall Damage Repair using 3D Printers: Opportunities and Challenges”, CITC 2017 The Ninth International Conference on Construction in the 21st Century, Dubai, United Arab Emirates, Mar. 5–7.
7. Kang, J, **Yeon, J.**, and Kandregula, S. (2015) “Fabrication of BIM CAVE 2: Challenges in Handling 9 Screen Walls”, ISARC 2015: 32nd International Symposium on Automation and Robotics in Construction and Mining, Oulu, Finland, Jun. 15–18.
8. **Yeon, J.**, Walewski, J. and Kim, A. (2015) “International Project Risk Assessment (IPRA) Tool Compatibility Test for the International Nuclear Power Plant Construction”, ASC 2015: 51st International Conference Associated Schools of Construction, College Station, Texas, USA, Apr. 22–25.
9. Walewski, J., Anderson, S., **Yeon, J.**, and Kim, A. (2013) “Risk Framework for the Next Generation Nuclear Power Plant Construction”, ICCEPM 2013: 5th International Conference on Construction Engineering and Project Management, Anaheim, California, USA, Jan 9–11.

10. **Yeon, J.**, Noh, M., and Park, T. (2007) “Experimental Analysis for Reinforced Concrete Deck Bonded with Steel Plate”, KCI 2007: Korea Concrete Institute Conference, Suwon, South Korea, Nov 1–3.

11. **Yeon, J.**, Noh, M., and Park, T. (2007) “Numerical Analysis for Novel-Type Steel-Concrete Composite Deck”, KSCE 2007: Korean Society of Civil Engineering Conference, Daegu, South Korea, Oct 10-12.

C. Technical Reports

1. **Yeon, J.**, Noh, M., Lee, J., and Park, T. (2007) “TTM Deck Evaluation (Static Test / Fatigue Test)”, Brain Korea 21 Project Research Report (Interconstech.co.,Ltd), Computational Solid & Structural Mechanic Laboratory, Hanyang University, Seoul, South Korea.

D. Presentations

1. Park, T., Jeon, J., Kim, R.E., Kim, W., Lee, J.H., Lee, S., **Yeon, J.**, and Lee, D.H (2020) “Damage Assessment of Civil Infrastructural Systems Subjected to Extreme Loadings”, International Conference on Damage Mechanics, Baton Rouge, Louisiana, USA, May 19-22.

2. Czarny, M., **Yeon, J.** and Oh, I. (2018) “Content Analysis Approach: Infrastructure Construction Risk Identification using the Hurricanes Harvey and Katrina Disasters”, Texas A&M System 2018: 15th Annual Pathways Research Symposium, Canyon, Texas, USA, November 1-2.

3. **Yeon, J.** (2018) “Applying 3D Printing Technology in the Construction Industry”, Korean Journal of Construction Engineering and Management, Korea Institute of Construction Engineering and Management, Vol. 19, No. 3: 47 – 49. (Invited Article)

4. **Yeon, J.** and Kang, J. (2017) “Rapid Spall Rehabilitation using 3D Printing Technology”, ASC 2017: 53rd International Conference Associated Schools of Construction, Seattle, Washington, USA, April 5-8.

5. **Yeon, J.,** Kang, J., Yan, W. (2016) “Investigation of the Structural Stability of Rapid Spall Repair Method using 3D Printing Technology”, Texas A&M College of Architecture 2016: 18th Annual Faculty Research Symposium, College Station, Texas, Oct. 24.

6. **Yeon, J.,** Kang, J. (2013) “Omnidirectional Treadmill for Immersive Virtual Reality System”, Texas A&M College of Architecture 2013: 15th Annual Faculty Research Symposium, College Station, Texas, Oct. 21.