Wooyoung Jung

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EDUCATION

Philosophy of Doctor in Civil Engineering   August/2016 – Current

Virginia Polytechnic Institute and State University, Blacksburg, VA, USA
- Expected Graduation Data: May/2020
- GPA Overall: 3.60/4.00

Master of Science in Architectural Engineering   March/2014 – February/2016

Yonsei University, Seoul, Republic of Korea
- GPA Overall: 4.18/4.30

Bachelor of Science in Architectural Engineering   March/2004 – February/2011

Yonsei University, Seoul, Republic of Korea
- GPA Overall: 3.34/4.30 (GPA Last Two Years: 3.63/4.30)
- Minor: Business Administration

PROFESSIONAL EXPERIENCE (ACADEMIC)

Graduate Research Assistant

Virginia Polytechnic Institute and State University, Blacksburg, VA, United State of America (2016 – Current)
- Project: Human-Aware Environments for Distributed Building Systems Operations (2017 – 2020)

Building Informatics Group (BIG) at Yonsei University (2014 – 2016)
- Project: Open BIM based Building Design Standard and IT-infrastructure (2014 – 2016)
- Project: Advanced architectural performance technologies based on future information (2013 – 2019)

Graduate Teaching Assistant

Virginia Polytechnic Institute and State University
- Building Environment Modeling and Processing (Fall 2016)

Yonsei University
- Logic in Architecture, and Architecture and new media (Fall 2015)
- Planning and Scheduling in Construction (Fall 2014)
- Digital Design Lab (Spring 2014)

PUBLICATIONS

Journal Papers

1. **W. Jung**, F. Jazizadeh. 2018. Vision-based Thermal Comfort Quantification for HVAC Control, Building and Environment, 142, pp.512 – 523.
2. F. Jazizadeh, **W. Jung**. 2018. Personalized Thermal Comfort through Digital Video Images for Energy-Efficient HVAC Control. Applied Energy, 220, pp.829 – 841.
3. **W. Jung**, G. Lee. 2016. Slim BIM Charts for Rapidly Visualizing and Quantifying Levels of BIM Adoption and Implementation. *Journal of Computing in Civil Engineering*, ASCE, 30(4)
4. **W. Jung**, T. Lee, P. Rhee, G. Lee. 2015. An Analysis of the Duration of the Construction Document Phase of Large Public Building Projects Delivered by the Total Solution Service from 2009 to 2014. *Korean journal of construction engineering and management*, KICEM, 16(4), pp 89-97.

Conference Papers

1. **W. Jung**, F. Jazizadeh. 2018. Multi-Occupancy Indoor Condition Optimization in consideration of Thermal Sensitivity, EG-ICE 2018, Lausanne, Switzerland, June 10-13
2. **W. Jung**, F. Jazizadeh. 2018. Towards Non-intrusive Metabolic Rate Evaluation for HVAC Control, ICCCBE 2018, Tampere, Finland, June 5-7
3. **W. Jung**, F. Jazizadeh. 2017. Towards Integration of Doppler Radar Sensors into Personalized Thermoregulation-Based Control of HVAC. Buildsys 2017. Delft, The Netherlands. November 8 – 9.
4. **W. Jung**, F. Jazizadeh. 2017. Non-intrusive Detection of Respiration for Smart Control of HVAC system. International Workshop on Computing in Civil Engineering (IWCCE) 2017. Seattle, WA. June 25 – 27.
5. G. Lee, K. Lee, **W. Jung**, K. Hwang, S. Han, N. Jung, H. Lee, M. Kim. 2016. Introduction to the Global BIM Dashboard.

16th International Conference on Computing in Civil and Building Engineering (ICCCBE) 2016. Osaka, Japan. July 6 – 8.

6. K. Lee, Y. Park, G. Lee, **W. Jung**, S. Lee, H. Lee. 2015. An Introduction to South Korea's BIM Knowledge Base Development Project. *32th International Symposium on Automation and Robotics in Construction and Minding (ISARC)*. Oulu, Finland. June 15 – 18.

PROFESSIONAL EXPERIENCE (PRACTICAL)

Field Engineer (Assistant Manager)

Daewoo Engineering & Construction
- Project: Nonhyeon Prugio-city 2nd project, Incheon, Republic of Korea, September/2011 – December/2013
    - In change of all the construction works and subcontractors (e.g., civil work (slurry-wall and excavation), structure work (double-beam system (steel), reinforced concrete, and precast concrete), and architectural and interior work (masonry, plastering, tile, water-proof, metal, stone, painting, gypsum board, furniture, landscaping, wall paper, and caulking),
    - Assisted safety, mechanic, and electronical teams.

Contract Engineer (Staff)

Daewoo Engineering & Construction
- Saint Regis Hotel Project, Kuala Lumpur, Malaysia, July/2011 – Auguest/2011
    - Supported mobilization of the project,
    - Documented construction plans and contracts.

Scheduler (Staff)

Daewoo Engineering & Construction
- Kuala Lumpur City Center (KLCC) Tower project, Kuala Lumpur, Malaysia, March/2011 – June/2011
    - Managed the master schedule by Primavera 6,
    - Supported an extension of time (EOT),
    - In change of interior works.

Estimator (Staff)

Daewoo Engineering & Construction
- Building Works Estimation Team, Seoul, Republic of Korea, January/2011 – February/2011
    - Assisted estimation works.

Field Engineer (Intern)

Daewoo Engineering & Construction
- Bupyeong Sangok Reconstruction Project, Incheon, Republic of Korea, July/2010 – August/2010
    - Assisted senior field engineers (e.g., checking shop drawings).

EXPERIENCE

Language study abroad

Bell English: English Schools UK, Cambridge and London in United Kingdom, March/2008 – December/2008
- Taken IELTS (7.5 overall), and acquired First Certificate in English (FCE), and Cambridge in Advanced English (CAE) certificates

Public Service Agent

Jung-dong community service center, Bucheon, Republic of Korea, January/2006 – February/2008

HONORS & AWARDS

Vecellio Fellow (Virginia Polytechnic Institute and State University)

Granted $555.55/month for two semesters, August/2016 – May/2017

University designated Scholarship (Yonsei University)

Granted $2,350 for a semester, September/2009 – December/2009

PRESENTATIONS (ORAL)

EG-ICE 2018

Multi-Occupancy Indoor Condition Optimization in consideration of Thermal Sensitivity, EG-ICE 2018, Lausanne, Switzerland, June 10-13

ICCCBE 2018

Towards Non-intrusive Metabolic Rate Evaluation for HVAC Control, ICCCBE 2018, Tampere, Finland, June 5-7
Mega

Buildsys 2017

Towards Integration of Doppler Radar Sensors into Personalized Thermoregulation-Based Control of HVAC, November/2017.
Delft, Netherlands

International Workshop on Computing in Civil Engineering

Non-intrusive Detection of Respiration for Smart Control of HVAC system (Oral). June/2017. Seattle, WA.

The University of British Columbia – Yonsei University Collaborative Research Workshop

The Status of BIM Adoption on Six Continents & the slim BIM model (Oral). January/2015. Vancouver, Canada.

Georgia Institute of Technology – Yonsei University Seminar

A Simple and Versatile Model for the Level of BIM Implementation (Oral). August/2014. Atlanta, GA.
BIM Forum & Academic Conference 2014

PAPER REVIEWS

A sub-reviewer of Construction Research Congress 2018

New Orleans, LA

A sub-reviewer of EG-ICE 2018

Lausanne, Switzerland

CREDENTIALS

Cambridge Advanced in English (CAE)

Cambridge English Language Assessment

First Certificate in English (FCE)

Cambridge English Language Assessment

SKILLS

Building Information Modeling (BIM) Software

Revit, Digital Project

Scheduling Program

Primavera, Microsoft Office Project

Graphic & 3D modeling

SketchUp, Photoshop

Data Analysis & Statistical Tool

MATLAB, SPSS

Programming Language

Java, Python

Web programming

HTML, CSS, Javascript, jQuery, XML, PHP

Database

MySQL

Micro-processor

Arduino

Others

AutoCAD, Microsoft Office, Oracle Crystal Ball, EndNote

AFFILIATIONS

The Korea Institute of Building Construction
Member

Korea Institute of Construction Engineering and Management
Member

EXTRACURRICULAR ACTIVITIES & VOLUNTEER EXPERIENCE

Outreach Activities
Topic: Saving Home Energy, Center for the Enhancement of Engineering Diversity, September/2016
Topic: Smart Building Environments, Center for the Enhancement of Engineering Diversity, July/2017, July/2018

Developer
http://globalbimdashboard.org. March/2015 – September/2015

Member (Vice-president in 2007)
The Form (Architectural Design Group). March/2005 – February/2011

Member
Yonsei Amateur Astronomical Association (YAAA). March/2004 – February/2005

Tutor (Volunteer)
Yonsei English Center for Children from Low-income Families. December/2009 – February/2010.