

# JAEHYUN PARK

## EDUCATION

---

- Doctor of Philosophy in Civil Engineering** Aug. 2013 – Dec. 2017  
*Purdue University, West Lafayette, IN*
- **Dissertation:** Dynamic Multi-Dimensional BIM for Total Construction As-built Documentation (defended on July 25, 2017)
  - **Advisor:** Dr. Hubo Cai / **Committee:** Dr. Phillip S. Dunston, Dr. Daniele Perissin, Dr. Hossein Ghasemkhani
- Master of Science in Architectural Engineering** Mar. 2008 – Feb. 2010  
*Yonsei University, Seoul, Korea*
- **Thesis:** Complex Shopping Mall Maintenance Management Process to reduce Carbon Dioxide
  - **Advisor:** Dr. Taehoon Hong / **Committee:** Dr. Ghang Lee, Dr. Seungwoo Han
- Bachelor of Science in Architectural Engineering & Bachelor of Art in Economics (Double Degrees)** Mar. 2004 – Feb. 2008  
*Yonsei University, Seoul, Korea*
- Early Graduation** Mar. 2002 – Feb. 2004  
*Seoul Science High School (for gifted students), Seoul, Korea*

## ACADEMIC EXPERIENCE

---

- Part-time Researcher** Sep. 2017 – Present  
*Lyles School of Civil Engineering, Purdue University, West Lafayette, IN*
- Teaching Assistant** Jan. 2014 – Aug. 2017  
*Lyles School of Civil Engineering, Purdue University, West Lafayette, IN*
- **Course Title and Responsibilities:**
    - 1) Computer Applications in Construction (Graduate course) – Taught 17 BIM sessions, and graded assignments and exams
    - 2) Life Cycle Engineering and Management of Constructed Facilities – Graded assignments and exams
    - 3) Legal Aspects of Construction Engineering – Graded assignments and exams
- Research Assistant** Jan. 2014 – Aug. 2017  
*Lyles School of Civil Engineering, Purdue University, West Lafayette, IN*
- Teaching Assistant** Mar. 2008 – Feb. 2010  
*Department of Architectural Engineering, Yonsei University, Seoul, Korea*
- **Course Title and Responsibilities:**
    - 1) Fundamentals of Building Construction (English course) – Taught 16 case study sessions, and graded assignments and exams
    - 2) Building Materials – Graded assignments and exams
    - 3) Construction Contract Administration – Graded assignments and exams
    - 4) Real Estate Development - Taught 16 case study sessions, and graded assignments and exams
- Research Assistant** Mar. 2008 – Feb. 2010  
*Department of Architectural Engineering, Yonsei University, Seoul, Korea*
- Tutor Created Contents (TCC) Online Tutor** Sep. 2007 – Feb. 2010  
*Center for Teaching and Learning, Yonsei University, Seoul, Korea*
- **Course Title and Responsibilities:**
    - 1) Engineering Mathematics I – Recorded 11 streaming video clips and operated online Q&A sessions for over 100 students
    - 2) Engineering Mathematics II – Recorded 10 streaming video clips and operated online Q&A sessions for over 100 students
    - 3) Introduction to Statistics – Recorded 12 streaming video clips and operated online Q&A sessions for over 250 students

# JAEHYUN PARK

**Tutor** Sep. 2005 – Feb. 2010  
*Center for Teaching and Learning, Yonsei University, Seoul, Korea*

- **Course Title and Responsibilities:**
  - 1) Engineering Mathematics I – Operated 10 offline tutoring sessions and supported their studies for 4-5 students per each semester
  - 2) Engineering Mathematics II – Operated 10 offline tutoring sessions and supported their studies for 4-5 students per each semester
  - 3) Introduction to Statistics – Operated 10 offline tutoring sessions and supported their studies for 7-8 students per each semester

## PROFESSIONAL EXPERIENCE

---

**Freelance VDC Specialist** Sep. 2017 – Present  
*New York, NY*

**Part-time BIM & IT Manager** Jan. 2014 – Present  
*Kwangjin Construction Co. Ltd., Seoul, Korea*

**Part-time Researcher** May 2013 – June 2013  
*Construction Information Technology Institute, DoallTech Co. Ltd. (as known as Graphisoft Korea), Seoul, Korea*

**Marketing Manager** Jan. 2011 – Mar. 2013  
*BIMobject Korea, Seoul, Korea*

**BIM Execution Planner & Researcher** Mar. 2010 – Mar. 2013  
*Construction Information Technology Institute, DoallTech Co. Ltd. (as known as Graphisoft Korea), Seoul, Korea*

## LICENSES AND CERTIFICATES

---

**Computational Interdisciplinary Graduate Programs (CIGP)** Aug. 2017  
*Purdue University, West Lafayette, IN*

**Applied Management Principles (AMP) Program (5.5 CEUs)** May 2016  
*Purdue University, West Lafayette, IN*

**Engineer Architecture** June 2008  
*Human Resources Development Service of Korea, Seoul, Korea*

**Industrial Engineer Information Processing** June 2006  
*Human Resources Development Service of Korea, Seoul, Korea*

## ACADEMIC PROJECTS

---

### Research Projects in US

1. Risk-based Specification for Construction
  - **Sponsor Agency:** Indiana Department of Transportation (INDOT), Indianapolis, IN
  - **Research Period:** Dec. 2015 – Feb. 2018
  - **Responsibility:** Graduate Research Assistant
2. Long Term Pavement Performance Indicators for Failed Materials
  - **Sponsor Agency:** Indiana Department of Transportation (INDOT), Indianapolis, IN
  - **Research Period:** Jan. 2014 – Dec. 2015
  - **Responsibility:** Graduate Research Assistant

## Research Projects in Korea

1. A development on the Integrated Management System for Construction Error Reduction using 3D Scanning and BIM Technologies
  - **Sponsor Agency:** Korea Small and Medium Business Administration, Daejeon, Korea
  - **Research Period:** June 2016 – June 2018
  - **Responsibility:** Co-Project Investigator
2. A development on the Web-based Project Management Information System (PMIS) for Construction Project Management in the United States
  - **Sponsor Agency:** Korea Small and Medium Business Administration, Daejeon, Korea
  - **Research Period:** Mar. 2013 – Sep. 2014
  - **Responsibility:** Research Coordinator
3. Smart Device based Construction Management System Development for Small and Medium-Sized Construction Projects
  - **Sponsor Agency:** Seoul Metropolitan Government, Seoul, Korea
  - **Research Period:** Oct. 2012 – Sep. 2013
  - **Responsibility:** Researcher & Research Coordinator
4. A Fundamental Research for Safety Management and Designated National Stone Pagodas Status Record
  - **Sponsor Agency:** National Research Institute of Cultural Heritage, Daejeon, Korea
  - **Research Period:** Aug. 2012 – Nov. 2012
  - **Responsibility:** Researcher
5. Convergence Technology for BIM/GIS-based Construction Space Information
  - **Sponsor Agency:** Korea Institute of Construction Technology, Goyang, Korea
  - **Research Period:** Apr. 2012 – Aug. 2012
  - **Responsibility:** Guest Researcher
6. A development on the Personalization Framework and System of Construction Project Management Information System using Smart Phone based Interactive Communication
  - **Sponsor Agency:** Korea Ministry of Knowledge Economy, Gwacheon, Korea
  - **Research Period:** Mar. 2010 – Apr. 2011
  - **Responsibility:** Researcher & Research Coordinator
7. Equipment and System Upgrade for Commercialization of Steel, PC and Curtainwall's Logistics and Progress Management System based on RFID + 4D
  - **Sponsor Agency:** Korea Ministry of Land, Transport and Maritime Affairs, Gwacheon, Korea
  - **Research Period:** Mar. 2010 – Apr. 2011
  - **Responsibility:** Researcher & Research Coordinator
8. Virtual Construction System Development
  - **Sponsor Agency:** Korea Ministry of Land, Transport and Maritime Affairs, Gwacheon, Korea
  - **Research Period:** Mar. 2008 – Oct. 2011
  - **Responsibility:** Researcher

## INDUSTRIAL PROJECTS

---

### BIM Execution Plan

1. Gyeongsang National University Hospital Turnkey Project BIM Execution Plan (*2<sup>nd</sup> award*)
  - **Client:** Korea Public Procurement Service, Daejeon, Korea
  - **General Contractor:** Hyundai Engineering & Construction Co., Ltd., Seoul, Korea
  - **Project Period:** Sep. 2012 – Dec. 2012
  - **Responsibility:** Primary Project Coordinator
2. National Bank of Kuwait Construction Project BIM Execution Plan
  - **Client:** National Bank of Kuwait (NBK), Kuwait City, Kuwait
  - **General Contractor:** Hyundai Engineering & Construction Co., Ltd., Seoul, Korea
  - **Project Period:** Aug. 2012 – Sep. 2012
  - **Responsibility:** Primary Project Coordinator

# JAEHYUN PARK

3. Korea Land & Housing Corporation New Office Building Construction Project BIM Execution Plan **(elected)**
  - **Client:** Korea Land & Housing Corporation, Seongnam, Korea
  - **General Contractor:** Hyundai Engineering & Construction Co., Ltd., Seoul, Korea
  - **Project Period:** July 2012 – Sep. 2012
  - **Responsibility:** Primary Project Coordinator
4. The St. Regis Amman Construction Project BIM Execution Plan
  - **Client:** Al Maabar International Investment LLC, Amman, Jordan
  - **General Contractor:** Daewoo Engineering & Construction Co., Ltd., Seoul, Korea
  - **Project Period:** Apr. 2012 – Apr. 2012
  - **Responsibility:** Primary Project Coordinator
5. Qatar National Museum Construction Project BIM Execution Plan **(elected)**
  - **Client:** Qatar Museums Authority (QMA), Doha, Qatar
  - **General Contractor:** Hyundai Engineering & Construction Co., Ltd., Seoul, Korea
  - **Project Period:** Mar. 2011 – May 2011
  - **Responsibility:** Secondary Project Coordinator
6. Digital Broadcasting Contents Center Turnkey Project BIM Execution Plan
  - **Client:** Korea Public Procurement Service, Daejeon, Korea
  - **General Contractor:** Hyundai Engineering & Construction Co., Ltd., Seoul, Korea
  - **Project Period:** Dec. 2010 – Jan. 2011
  - **Responsibility:** Secondary Project Coordinator
7. Abu Dhabi Louvre Museum Construction Project BIM Execution Plan
  - **Client:** Tourism Development Investment Company (TDIC), Abu Dhabi, UAE
  - **General Contractor:** Posco Engineering & Construction Co., Ltd., Pohang, Korea
  - **Project Period:** Oct. 2010 – Oct. 2010
  - **Responsibility:** Secondary Project Coordinator
8. Korea Power Exchange New Office Building Design Competition BIM Execution Plan **(2<sup>nd</sup> award)**
  - **Client:** Korea Public Procurement Service, Daejeon, Korea
  - **Contractor:** Hyundai Architects & Engineers Associates Co., Ltd., Seoul, Korea
  - **Project Period:** July 2010 – July 2010
  - **Responsibility:** Secondary Project Coordinator

## Other Projects

1. Korea National Land Development Exhibition Hall Construction Project **(elected)**
  - **Client:** Korea Ministry of Land, Infrastructure and Transport, Sejong, Korea
  - **Project Period:** Aug. 2015 – July 2017
  - **Responsibility:** BIM & IT Manager
2. Proposal for Orion Confectionery Co. Ltd. New Automated Warehouse Construction Project **(2<sup>nd</sup> award)**
  - **Client:** Korea Orion Confectionery Co. Ltd., Seoul, Korea
  - **Project Period:** Mar. 2014 – June 2014
  - **Responsibility:** BIM & IT Manager
3. Technical Proposal for BIM based 3D Restoration of South Gate of Seoul (National Treasures No. 1) **(2<sup>nd</sup> award)**
  - **Client:** Cultural Heritage Administration of Korea, Daejeon, Korea
  - **Project Period:** May 2012 – June 2012
  - **Responsibility:** Primary Project Coordinator
4. Proposal for Samsung C&T Engineering & Construction Group BIM Object System Development
  - **Client:** Samsung C&T Engineering & Construction Group, Seoul, Korea
  - **Research Period:** Nov. 2011 – Dec. 2011
  - **Responsibility:** Primary Project Coordinator
5. BIM BUZZ@Singapore 2011 (Professional Category, International BIM Competition)
  - **Host:** Singapore Building & Construction Authority (BCA) and buildingSMART Singapore, Singapore
  - **Project Period:** Sep. 2011 – Sep. 2011 (48 hours)

# JAEHYUN PARK

- **Responsibility:** Primary Project Coordinator
- 6. Proposal for Samsung C&T Engineering & Construction Group BIM Prototype and Manual Development (**elected**)
  - **Client:** Samsung SDS Co., Ltd., Seoul, Korea
  - **Research Period:** July 2010 – Aug. 2010
  - **Responsibility:** Secondary Project Coordinator
- 7. Proposal for Project Management Information System (PMIS) Development of Lotte World Tower Construction Project (**elected**)
  - **Client:** Lotte Data Communication Company, Seoul, Korea
  - **Research Period:** Mar. 2010 – Mar. 2010
  - **Responsibility:** Secondary Project Coordinator

## HONORS AND AWARDS

---

<b>Excellent Paper Award</b> <i>Proceeding of Spring Annual Conference of the Architectural Institute of Korea 2012, Seoul, Korea</i>	Apr. 2012
<b>Excellent Paper Award</b> <i>4<sup>th</sup> International Conference on Construction Engineering and Project Management (ICCEPM-2011), Sydney, Australia</i>	Feb. 2011
<b>Certificate of Distinction in the Master's thesis</b> <i>Yonsei University, Seoul, Korea</i>	Nov. 2010
<b>Excellent Paper Award</b> <i>Proceeding of Spring Annual Conference of the Korea Institute of Building Construction 2010, Seoul, Korea</i>	May 2010
<b>1<sup>st</sup> Prize</b> <i>Digital Architecture 2009 of the Architectural Institute of Korea (Ubiquitous Architecture/BIM), Seoul, Korea</i>	Nov. 2009
<b>Excellent Paper Award</b> <i>Proceeding of Spring Annual Conference of the Korea Institute of Building Construction 2009, Seoul, Korea</i>	May 2009
<b>Special Selection</b> <i>Digital Architecture 2008 of the Architectural Institute of Korea (Ubiquitous Architecture/BIM), Seoul, Korea</i>	Nov. 2008
<b>Participation Award</b> <i>The 49<sup>th</sup> Korea National Science Contest, Seoul, Korea</i>	Oct. 2003
<b>2<sup>nd</sup> Prize</b> <i>The 2003 Federation of International Robot-soccer Association (FIRA) Junior Cup Korea National Competition, Seoul, Korea</i>	May 2003

## TECHNICAL SKILLS

---

### Languages

C, C++, C#, Visual Basic.NET, Visual Basic, ASP.NET, ASP, PHP, HTML, CSS, JavaScript, VBScript, SQL, UML, MATLAB, Python, Java.

### Architectural Design and BIM

Autodesk Revit, Autodesk Navisworks, Autodesk AutoCAD, Graphisoft ArchiCAD, Synchro Pro, Solibri Model Checker, Trimble SketchUp, Thunderhead Engineering PyroSim, Thunderhead Engineering PathFinder.

### Scheduling

Microsoft Project, Oracle Primavera.

## Energy Analysis

eQUEST, Autodesk Ecotect, Graphisoft EcoDesigner.

## Graphics and Media

Adobe Photoshop, Adobe Illustrator, Adobe Dreamweaver, Adobe Premiere, Adobe After Effects, Sony Sound Forge, Sony Vegas.

## Statistics

IBM SPSS Statistics, Aptech Systems GAUSS, IHS Eviews, Minitab, Econometric Software NLOGIT.

## PUBLICATIONS

---

### Journal Papers (in English)

1. Park, J., and Cai, H. (2017). "Photo Analysis for Construction Progress Control using 4D BIM." *Under review in the Journal of Advanced Engineering Informatics (Elsevier)*.
2. Park, J., and Cai, H. (2017). "Dynamic Daily 4D BIM for Tracking Construction Progress through a Web Environment." *Under review in the Journal of Construction Engineering and Management (ASCE)*.
3. Park, J., Cai, H., and Perissin, D. (2017). "Bring Information to the Field: A Photo and BIM Approach." *Paper scheduled for publication in the Journal of Computing in Civil Engineering (ASCE)*.
4. Park, J., Cai, H., Dunston, P. S., and Ghasemkhani, H. (2017). "Database-supported and Web-based Visualization for Daily 4D BIM." *Journal of Construction Engineering and Management, ASCE*, 143(10), 04017078.
5. Park, J., and Cai, H. (2017). "WBS-based Dynamic Multi-Dimensional BIM Database for Total Construction As-built Documentation." *Automation in Construction, Elsevier*, 77, pp.15-23.
6. Park, J., Yuan, C., and Cai, H. (2015). "Life-Cycle Cost-based Decision Framework for Failed Portland Cement Concrete Pavement Materials in Indiana." *Transportation Research Record, TRB*, 2524, pp.33-41.
7. Park, J., and Hong, T. (2013). "Analysis of South Korea's economic growth, carbon dioxide emission and energy consumption using Markov Switching Model." *Renewable & Sustainable Energy Reviews, Elsevier*, 18(1), pp.543-551.
8. Park, J., Ham, S. and Hong, T. (2012). "Construction Business Cycle Analysis using the Regime Switching Model." *Journal of Management in Engineering, ASCE*, 28(4), pp.362-371.
9. Park, J., and Hong, T. (2012). "Trends and Prospects of the U.S. Housing Market using Markov Switching Model." *Journal of Urban Planning and Development, ASCE*, 138(1), pp.10-17.
10. Park, J., and Hong, T. (2011). "Process of Community-based Sustainable CO<sub>2</sub> Management." *Journal of Construction Engineering and Project Management, KICEM*, 1(1), pp.11-17.
11. Park, J., and Hong, T. (2011) "Maintenance Management Process for reducing CO<sub>2</sub> emission in the Complex Shopping Mall." *Energy and Buildings, Elsevier*, 43(4), pp.894-904.

### Journal Papers (in Korean)

1. Park, J. (2017). "BIM Adoption Strategy for Small and Medium size General Contractors in Korea." *In preparation for the Journal of Korea Institute of Building Information Modeling (KIBIM)*.
2. Park, J., and Hong, T. (2010). "Improvements of Policies related Building Energy Reduction in Korea." *Journal of Korea Institute of Construction Engineering and Management, KICEM*, 11(4), pp.13-22.
3. Park, J., Choi, H., Cho, Y., Bang, K., Yun, S., and Paek, J. (2010). "A Study on the Development of Probabilistic Duration Estimation Module using Monte Carlo Simulation." *Journal of the Architectural Institute of Korea (Structure & Construction), AIK*, 26(5), pp.101-108.
4. Lee, J., Park, J., Park, K., and Paek, J. (2009). "A Study on the Effective Asset Management Business Model for Campus Facilities." *Journal of the Architectural Institute of Korea (Planning & Design), AIK*, 25(7), pp.279-286.
5. Park, J., Yun, S., and Paek, J. (2009). "A Preliminary Study of BIM based High-Rise Mixed-use Building Maintenance Management System." *Journal of the Architectural Institute of Korea (Planning & Design), AIK*, 25(6), pp.35-42.

6. Yun, S., Park, J., and Jeong, S. (2009). "A Study on the Effective Asset Management Business Model for Campus Facilities." *Journal of the Architectural Institute of Korea (Structure & Construction)*, AIK, 25(6), pp.139-146.
7. Lee, K., Park, J., Bang, K., Yun, S., and Paek, J. (2009). "A Study on Developing a BIM-based Construction Simulation Application." *Journal of the Architectural Institute of Korea (Structure & Construction)*, AIK, 25(5), pp.205-212.
8. Park, J., Cho, Y., Park, W., Yun, S., and Paek, J. (2009). "Design of a Maintenance Management System for Serviced Residence." *Journal of the Architectural Institute of Korea (Planning & Design)*, AIK, 25(1), pp.73-81.
9. Cho, Y., Park, J., Park, W., and Paek, J. (2008). "A Study on the Regional Revitalization Methods from Development Projects in Urban Regeneration Projects: Focused on Konkuk University Subway Station Project." *Journal of the Architectural Institute of Korea (Planning & Design)*, AIK, 24(11), pp.215-223.
10. Park, J., Cho, Y., Park, W., and Paek, J. (2008). "An Analysis of Construction Tendency in Korea Market based on Variation of Gross Construction Industry Product." *Journal of the Architectural Institute of Korea (Structure & Construction)*, AIK, 24(8), pp.195-202.
11. Jo, J., Park, J., Park, W., Yun, S., and Paek, J. (2008). "A Study on the BIM based Architectural Construction Simulation System using Combinative Construction Schedule Creation Method." *Journal of the Architectural Institute of Korea (Structure & Construction)*, AIK, 24(7), pp.101-108.

## Conference Papers (in English)

1. Park, J. (2018). "Just-In-Time Material Management using 4D BIM and GIS." *In preparation for the 35<sup>th</sup> International Symposium on Automation and Robotics in Construction, July 23-26, Berlin, Germany.*
2. Park, J., and Cai, H. (2018). "Framework of 3D BIM and Smart Device-based Indoor Navigation System for Construction Management." *Under review in the Construction Research Congress (CRC) 2018, Apr. 2-5, New Orleans, LA.*
3. Yuan, C., Park, J., Xu, X., Cai, H., Abraham, D., and Bowman, M. (2018). "Risk-based Prioritization of Construction Inspection." *Under review in the Transportation Research Board (TRB) 97<sup>th</sup> Annual Meeting, Jan. 7-11, Washington, D.C.*
4. Park, J., Yuan, C., Xu, X., Cai, H., Abraham, D., and Bowman, M. (2018). "A Synthesis Study on Material Testing and Construction Inspection, and Gaps towards Pavement Long-term Performance." *Under review in the Transportation Research Board (TRB) 97<sup>th</sup> Annual Meeting, Jan. 7-11, Washington, D.C.*
5. Park, J., and Cai, H. (2017). "Framework of Dynamic Daily 4D BIM for Tracking Construction Progress through a Web Environment." *The 2017 ASCE International Workshop on Computing in Civil Engineering (IWCCCE), June 25-27, Seattle, WA.*
6. Park, J., and Cai, H. (2017). "Framework of Automated As-built Photo Contents and Context Retrieval using 4D BIM." *The 6th CSCE/ASCE/CRC International Construction Specialty Conference, May 31-June 3, Vancouver, Canada.*
7. Li, S., Park, J., and Cai, H. (2017). "Process Capability Index – An Effective Strategy for Infrastructure Construction Inspection." *The Transportation Research Board (TRB) 96<sup>th</sup> Annual Meeting, Jan. 8-12, Washington, D.C.*
8. Park, J., and Cai, H. (2015). "Automatic Construction Schedule Generation Method through BIM Model Creation." *2015 ASCE International Workshop on Computing in Civil Engineering (IWCCCE), June 21-23, Austin, TX.*
9. Park, J., Yuan, C. and Cai, H. (2015). "A Life Cycle Cost based Decision Framework for Failed Materials of Portland Cement Concrete Pavement in Indiana." *Transportation Research Board (TRB) 94<sup>th</sup> Annual Meeting, Jan. 11-15, Washington, D.C.*
10. Park, J., Choi, H. and Choi, C. (2012). "Building Information Modeling for Construction Heritages in South Korea." *The 17<sup>th</sup> Conference on Cultural Heritage and New Technologies, Nov. 5-7, Vienna, Austria.*
11. Park, J., and Hong, T. (2011). "Process of Community-Based Sustainable CO<sub>2</sub> Management." *The 4<sup>th</sup> International Conference on Construction Engineering and Project Management (ICCEPM-2011), Feb. 16-18, Sydney, Australia.*
12. Park, J., Choi, H., Yoon, S. and Choi, C. (2010). "BIM based Construction Management for Architectural Cultural properties." *The 8th International Symposium on Architectural Interchanges in Asia, Nov. 9-12, Kitakyushu, Japan.*
13. Park, J., and Paek, J. (2009). "Analysis of US Real Estate Business using 2-State Markov Switching Model." *The 14<sup>th</sup> International Symposium on Advancement of Construction Management and Real Estate (CRIOCM 2009), Oct. 29-31, Nanjing, China.*
14. Park, J., Yun, S. and Paek, J. (2009). "A Study on Duration Estimate Method using Stochastic Model in the BIM Environment." *The 3<sup>rd</sup> International Conference on Construction Engineering and Management and the 6<sup>th</sup> International Conference on Construction Project Management (ICCEM/ICCPM 2009), May 27-30, Jeju, Korea.*

## Conference Papers (in Korean)

1. Park, J., Choi, H., Lee, S., An, D., Choi, C., and Kim, S. (2012). "Considerations Analysis of Libraries Development for BIM based Restoration and Maintenance Management of Cultural Heritages." Proceeding of Spring Annual Conference of the Architectural Institute of Korea 2012, Apr. 28, Seoul, Korea.
2. Park, J., Choi, H., Lee, S., An, D., Choi, C., and Kim, S. (2012). "Introducing methods of BIM for Restoration Construction of Stone pagoda of Mireuksa Temple site." Proceeding of Spring Annual Conference of the Architectural Institute of Korea 2012, Apr. 28, Seoul, Korea.
3. Park, J., Choi, H., Lee, S., An, D., Choi, C., and Kim, S. (2012). "Drawing Method of BIM map for Maintenance Management of Cultural Heritages." Proceeding of Spring Annual Conference of the Architectural Institute of Korea 2012, Apr. 28, Seoul, Korea.
4. Park, J., Lee, S., and Choi, C. (2012). "Open BIM based Library Development Process." 2012 Computational Structural Engineering Institute of Korea (COSEIK) Annual Conference, Apr. 12-13, Pyeongchang, Korea.
5. Yoon, S., Chin, S., Park, J., and Choi, C. (2011). "A Case Study on RFP (Request For Proposal) for BIM Execution Plan in International Construction Projects." Korea Institute of Building Information Modeling (KIBIM) Annual Conference 2011, May 20, Seoul, Korea.
6. Yoon, S., Park, J., Chin, S., and Choi, C. (2011). "Smartphone based Project Management Information System." 2011 Computational Structural Engineering Institute of Korea (COSEIK) Annual Conference, Apr. 14-15, Busan, Korea.
7. Park, J., Yoon, S., Choi, C., and Chin, S. (2010). "VRML based Realtime RFID+4D Progress Management System Development." Proceeding of Spring Annual Conference of the Korea Institute of Building Construction 2010, May 14, Seoul, Korea.
8. Park, J., Yun, S., and Paek, J. (2009). "A Study on Proto-type Development of BIM based Stochastic Duration Estimation Module." Proceeding of Spring Annual Conference of the Korea Institute of Building Construction 2009, May 23, Seoul, Korea.
9. Lee, K., Park, J., Cho, S., Cho, Y., Yun, S., and Paek, J. (2009). "Application of BIM Elements for Owner's Decision-Making Support." Proceeding of Spring Annual Conference of the Korea Institute of Building Construction 2009, May 23, Seoul, Korea.
10. Park, J., Yun, S., and Paek, J. (2008). "A Study on BIM based Maintenance Management System of High-Rise Mixed-use Building." Proceeding of Annual Conference of the Architectural Institute of Korea 2008, Oct. 24, Gwangju, Korea.
11. Park, J., Cho, Y., Park, W., Oh, J., and Paek, J. (2008). "A Study of DB System Establishment for Facility Management of High-Rise Mixed-use Building in Urban Regeneration." Proceeding of Spring Annual Conference of the Korea Institute of Building Construction 2008, May 9, Yongin, Korea.
12. Park, J., Yun, S., and Paek, J. (2008). "A Study on Proto-type Development of BIM based Architectural Construction Simulation System." 2008 Computational Structural Engineering Institute of Korea (COSEIK) Annual Conference, Apr. 17-18, Seoul, Korea.

## Project Reports (in English)

1. Park, J., Yuan, C. and Cai, H. (2016). *Long Term Pavement Performance Indicators for Failed Materials*. Joint Transportation Research Program (JTRP) Publication No. FHWA/IN/JTRP-2016/10, Indiana Department of Transportation (INDOT) and Purdue University, West Lafayette, Indiana.

## Project Reports (in Korean)

1. Yoon, S., Park, J., and Choi, C. (2012). *Virtual Construction System Development*. 06-Unified and Advanced Construction Technology Program-E01, Korea Ministry of Land, Transport and Maritime Affairs, Gwacheon, Korea.
2. Yoon, S., Park, J., and Choi, C. (2011). *A development on the Personalization Framework and System of Construction Project Management Information System using Smart Phone based Interactive Communication*. A1350-1002-0086, Korea Ministry of Knowledge Economy, Gwacheon, Korea.
3. Yoon, S., Park, J., Choi, C. and Chin, S. (2011). *Equipment and System Upgrade for Commercialization of Steel, PC and Curtainwall's Logistics and Progress Management System based on RFID+4D*. 09TRPI-C053953-01, Korea Ministry of Land, Transport and Maritime Affairs, Gwacheon, Korea.

## INVITED TALKS AND PRESENTATIONS

1. "New Paradigm of the Construction Industries, Building Information Modeling (BIM)." Presented at the Department of Architecture and Interior Design, Keimyung College University on June 7, 2013, Daegu, Korea.



## INTELLECTUAL PROPERTY RIGHTS

---

### Registered Patents (Korea)

1. Project Management Information System and Method using Smart Phone
  - **Registration Date:** Feb. 20<sup>th</sup>, 2013
  - **Registration Number:** 10-1237270
  - **Inventor:** Yoon, S., Choi, C., Park, J., Park, M., Lee, H., Chin, S. and Choi, Y.
2. Potable Device Case having Measuring Module
  - **Registration Date:** Nov. 21<sup>st</sup>, 2012
  - **Registration Number:** 10-1201732
  - **Inventor:** Yoon, S., Choi, C., Park, J., Park, M., Lee, H., Chin, S. and Choi, Y.

### Pending Patents (International)

1. Method, System and Computer-Readable Recording Media for Providing Information on Greenhouse Gas Emission of Building
  - **Patent Type:** Patent Cooperation Treaty (PCT) Patent
  - **Application Date:** June 29<sup>th</sup>, 2012
  - **Application Number:** PCT/KR2012/010031
  - **Inventor:** Park, J.

### Pending Patents (Korea)

1. Method, Terminal, System and Computer-Readable Recording Media for Providing Software Library
  - **Application Date:** Mar. 6<sup>th</sup>, 2013
  - **Application Number:** 10-2013-0024015
  - **Inventor:** Choi, C., Lee, S., Park, J., Lee, S.
2. Method, System and Computer-Readable Recording Media for Providing Information on Greenhouse Gas Emission of Building
  - **Application Date:** June 29<sup>th</sup>, 2012
  - **Application Number:** 10-2012-0071000
  - **Inventor:** Park, J.
3. Labor Management System and Method using Smart Phone
  - **Application Date:** Apr. 28<sup>th</sup>, 2011
  - **Application Number:** 10-2011-0040256
  - **Inventor:** Yoon, S., Choi, C., Park, J., Park, M., Lee, H., Chin, S. and Choi, Y.

### Registered Software (Korea Copyright Commission, Korea)

1. BIMS
  - **Registration Date:** Jan. 14<sup>th</sup>, 2010
  - **Registration Number:** 2010-01-199-000255
  - **Creator:** Park, J.
2. VA-CoMACS Simulator
  - **Registration Date:** Jan. 14<sup>th</sup>, 2010
  - **Registration Number:** 2010-10-121-000256
  - **Creator:** Park, J., Yun, S. and Paek, J.
3. VA-CoMACS Duration Estimation Module
  - **Registration Date:** May 18<sup>th</sup>, 2009
  - **Registration Number:** 2009-01-121-002603
  - **Creator:** Park, J., Yun, S. and Paek, J.

# JAEHYUN PARK

## PROFESSIONAL AFFILIATIONS

---

<b>Member</b> <i>ASCE Visualization, Information Modeling and Simulation (VIMS) Committee</i>	June 2015 – Present
<b>Member</b> <i>American Society of Civil Engineers (ASCE)</i>	Jan. 2015 – Present
<b>Member</b> <i>Computational Structural Engineering Institute of Korea (COSEIK)</i>	Jan. 2012 – Present
<b>Member</b> <i>Korea Institute of Construction Engineering and Management (KICEM)</i>	Jan. 2010 – Present
<b>Member</b> <i>The Korea Institute of Building Construction (KIC)</i>	Jan. 2008 – Present
<b>Member</b> <i>Architectural Institute of Korea (AIK)</i>	Jan. 2008 – Present

## PROFESSIONAL SERVICES

---

<b>Reviewer</b> <i>Automation in Construction, Elsevier</i>	Mar. 2017 – Present
<b>Sub Reviewer</b> <i>2016 Conference on Innovative Production and Construction (IPC), Australasian Joint Research Centre for Building Information Modelling</i>	Aug. 2016 – Aug. 2016
<b>Reviewer</b> <i>Journal of Computing in Civil Engineering, ASCE</i>	Sep. 2013 – Present