

# Jae-Ho Pyeon

Department of Civil and Environmental Engineering  
Charles W. Davidson College of Engineering  
San Jose State University  
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## EDUCATION

Ph.D. in Construction Engineering and Management, Civil and Coastal Engineering,  
**University of Florida**, Gainesville, Florida, December 2005.

Dissertation Title: *Development of a Simulation Model to Predict the Impact of Incentive Contracts on Transportation Construction Project Time Performance*

M.E. in Construction Engineering and Management, Civil and Coastal Engineering,  
**University of Florida**, Gainesville, Florida, August 2003

M.E. in Civil Engineering,  
**Kyungpook National University**, Daegu, S. Korea, February 1999

B.E. in Civil Engineering,  
**Kyungpook National University**, Daegu, S. Korea, February 1995

## PROFESSIONAL EXPERIENCE

**Associate Professor** Department of Civil and Environmental Engineering  
San Jose State University, San Jose, California  
August 2013 – present

**Assistant Professor** Department of Civil and Environmental Engineering  
San Jose State University, San Jose, California  
August 2007 – August 2013

Duties include teaching undergraduate and graduate courses, service on campus communities, undergraduate and graduate student advising, laboratory development, student service, professional service, community service, and research.

### Undergraduate Courses Taught

*CE131: Introduction to Construction Engineering*

*CE132: Construction Methods and Equipment*

*CE134: Project Management for Construction*

### Graduate Courses Taught

*CE233: Construction Management*

*CE235: Information Systems in Construction Management*

*CE239: Information Technology in Construction*

## Administrative Service

### **Graduate Coordinator** Civil and Environmental Engineering (Fall 2012 – present)

Elected by the full-time CEE faculty to serve from Fall 2012 to Spring 2014. Duties as Graduate Coordinator include:

- Providing general advice about academic rules and policies
- Advising on probation, disqualification and Programs of Study
- Communicating with students regarding deadlines for major forms, advising office hours, deadlines for completing advising during the semester, etc.
- Processing CEE Dept. Candidacy Form by reviewing all courses required to complete the Master Degree and other required documents

### **Undergraduate Major Advisor**, Civil and Env. Engineering (Fall 2009 – present)

Elected by the full-time CEE faculty to serve from Fall 2009 to Spring 2012. Duties as Undergraduate Major Advisor include:

- Providing general advice about academic rules and policies
- Advising on probation, disqualification and Programs of Study
- Communicating with students regarding deadlines for major forms, advising office hours, deadlines for completing advising during the semester, etc.
- Processing CEE Dept. Major Form by reviewing all courses required to complete the Baccalaureate Degree and other required documents

### **Program Coordinator**, Construction Engineering program, CEE (Fall 2007 – present)

Duties as Construction Engineering Program Coordinator include:

- Providing all greensheets by reviewing and approving course objectives and student learning outcomes for the following construction courses: CE131, CE132, CE133, CE134, CE232, CE234, CE236, CE237, CE238, and CE239.
- Searching and recommending part-time lecturers for the above courses.

## Committee Service

### **College of Engineering**

- Educational Excellence Task Force (EdEx) (Spring 2012 – present)
  - Participating in meetings and serving as the lead person for the e-learning initiative of the EdEx Task Force.
- Designated Graduate Advisors Committee (Fall 2012 – present)
  - Participating in monthly meetings
- Undergraduate Curriculum Committee (Fall 2008 – Spring 2009, Spring 2012)
  - Participated in monthly meetings and reviewed curriculum proposals including minor course changes, new and experimental course proposals, and catalog changes.
- Graduate Study Committee (Fall 2009 – Spring 2011, Fall 2012 – present)
  - Participated in bi-weekly meetings and reviewed Graduate School Policies and curriculum proposals.
  - Attended 2009 Graduate Student Open Forum, analyzed students' survey results and provided a summary report.

### **Department of Civil and Environmental Engineering**

- Undergraduate Scholarship Committee (Fall 2007 – present)
  - **Committee Chair** (Spring 2010, Fall 2011 – present)
- CEE ABET Committee (Spring 2009 – Present)
- CEE Curriculum Committee (Fall 2007 – present)
- Administrative Support Coordinator Recruitment Committee (Spring 2008)
  - **Committee Chair**
- Water Resources Engineering Faculty Recruitment Committee (Fall 2007 – Spring 2008)

### **Student Service**

**Academic Advisor**, Construction Engineering program (Fall 2007 – present)

**Student Organization Faculty Advisor**, The Associated General Contractors of California (Fall 2007 – present)

### **Professional Service**

**University Representative**, Transportation Research Board, Washington, D.C. (2010 – present)

**Research Review Panel**, Work Zone Road User Costs, Office of Operations, Federal Highway Administration, Washington, D. C. (2010 – 2011)

**Research Associate**, Mineta Transportation Institute, San Jose, CA. (2008 – present)

**External Reviewer of Research**, Center for Multimodal Solutions for Congestion Mitigation, U.S. Department of Transportation Tier 1 University Transportation Center, Gainesville, FL.

**Session Chair**, Architecture and Planning, The 28th International Symposium on Automation and Robotics in Construction, ISARC 2011.

**Journal Reviewer** of ASCE Journal of Construction Engineering and Management, KICEM Journal of Construction Engineering and Project Management, KSCE Journal of Civil Engineering, International Information Institute, etc.

**Regional Conference Organizer**, The 18th Annual South-Western Regional Technology Conference, Korean-American Scientists and Engineers Association, California Institute of Technology, Pasadena, CA. (February 2008)

### **Community Service**

**Vice President**, Silicon Valley Chapter, Korean-American Scientists and Engineers Association. (2009 – 2010, 2012 - 2013)

**Post-Doc. Associate** Department of Civil and Coastal Engineering  
University of Florida, Gainesville, Florida  
January 2006 – August 2007

Prepared research proposals and performed the following research projects:

- *Evaluation of Alternative Contracting Techniques on FDOT Construction Projects* (sponsored by the Florida Department of Transportation): Collected data on alternative

contracting project time, cost, and quality from several FDOT databases and performed a comprehensive evaluation of the FDOT alternative contracting efforts.

- *Integration of XML Schemas for the Exchange of FDOT Construction Project Data* (sponsored by the Florida Department of Transportation): Performed a comprehensive review of the FDOT construction process with regard to data exchange needs and XML schemas.
- *Improving the Time Performance of Highway Construction Contracts* (sponsored by the National Cooperative Highway Research Program): Developed specific criteria and procedures to facilitate the improvement of the key delay avoidance and time improvement concepts.

Assisted in teaching the following courses communicating with distance students, grading on- and off-campus students' assignments and team projects:

- Electronic Delivery of Graduate Engineering (EDGE program at UF) courses
  - Construction Engineering
  - Engineering Project Management
- Undergraduate Senior Capstone course
  - Construction-Geotech-Structures Senior Capstone

**Research & Teaching Assistant**      Department of Civil and Coastal Engineering  
University of Florida, Gainesville, Florida  
January 2001 – December 2005

Completed research projects sponsored by the Florida Department of Transportation:

- *Development of procedures for utilizing Pit Proctors in the FDOT construction process for pavement base materials* (December 2004)
- *Development of improved procedures for managing pavement markings during FDOT highway construction projects* (August 2003)

Graded exams and assignments and tutored students during office hours.

- Courses: Engineering Project Management, Construction Engineering, and Construction Methods and Management

**Engineering Intern**      Road and Bridge Division  
Sarasota County Public Works, Sarasota, Florida  
Summer 2004

Collected sidewalk obstruction data using GPS, constructed sidewalk database using *ArcGIS*, and inspected bridges in Sarasota County, Florida.

**Assistant Project Engineer**      Dukwon Construction Co., Ltd., Daegu, Korea  
February 1999 – November 1999

Prepared bid documents estimating quantities of work and managed medium- or low-level bridge reconstruction projects.

**Assistant Project Engineer**      Duksan Construction Co., Ltd., Daegu, Korea  
February 2000 – June 2000

Prepared bid documents estimating quantities of work and managed medium- or low-level bridge reconstruction projects.

**Research Assistant** Department of Civil Engineering  
Kyungpook National University, Daegu, Korea  
March 1996 – June 1997

Assisted in detailed inspection and analysis of major bridges in Daegu, Korea.

**Engineering Intern** Korea Industrial Development Co., Ltd.  
Hyundai Group, Seoul, Korea  
December 1994 – April 1995

Completed in-service training at the Hyundai Group and had on-the-job training at job sites of highway, bridge, and subway construction in Seoul, Korea.

## **PUBLICATIONS**

### **Peer-Reviewed Journal Articles**

Kang, L., **Pyeon, J.**, Moon, H., Kim, C., and Kang, M. (In-press), “Development of Improved 4D CAD System for Horizontal Works in Civil Engineering Project,” *Journal of Computing in Civil Engineering*, Vol. 27, No. 3, pp. 212-230, ASCE, Reston, VA, May 2013.

Cho, Y., Kabassi, K., **Pyeon, J.**, Choi, K., Wang, C., and Norton, T., “Effectiveness Study for Temporary Pavement Markings Removal Methods in Roadway Construction Zones,” *Journal of Construction Engineering and Management*, Vol. 139, Issue No. 3, pp. 257-266, ASCE, Reston, VA, May 2012.

Choi, K., Kwak, Y., **Pyeon, J.**, and Son, K., “Schedule Effectiveness of Alternative Contracting Strategies for Transportation Infrastructure Improvement Projects,” *Journal of Construction Engineering and Management*, Volume 138, Issue No. 3, pp. 323-330, ASCE, Reston, VA, March 2012.

Lee, H., Kim, S., Park, M., Ji, S., Seong, K., and **Pyeon, J.** “A Method of Assigning Weight Values for Qualitative Attributes in CBR Cost Model,” *Korean Journal of Construction Engineering and Management*, Korea Institute of Construction Engineering and Management, Vol. 11, No. 6, pp. 53-61, Serial No. 59, ISSN 2005-6095, January 2011.

Kim, H., Lee, H., Park, M., Lee, K., and **Pyeon, J.**, “Hazardous Area Identification Model Using Automated Data Collection Based on BIM,” *Korean Journal of Construction Engineering and Management*, Korea Institute of Construction Engineering and Management, Vol. 11, No. 6, pp. 14-23, Serial No. 58, ISSN 2005-6095, November 2010.

Minchin, R., Ellis, R., **Pyeon, J.**, and Jichao, Z., “Use of Innovative Contracting Methods by DOTs - Project Managers Speak,” *Journal of Civil Engineering and Architecture*, Vol. 4, Issue 8, pp. 14-26, ISSN 1934-7359, Libertyville, IL, August 2010.

**Pyeon, J.**, “Traffic Impact on Incentive Contracting Project Time Performance during Highway Construction,” *Journal of Civil Engineering and Architecture*, Vol. 4, Issue 7, pp. 9-14, ISSN 1934-7359, Libertyville, IL, July 2010.

Ellis, R., **Pyeon, J.**, Lee, S. and Kim, B., “Evaluation of Seal Coating Treatments to Manage Temporary Pavement Paint Markings during Highway Construction,” *KSCE Journal of Civil Engineering*, Vol. 14, No. 4, pp. 461-471, ISSN 1226-7988, July 2010.

Hong, J., **Pyeon, J.**, Tedesco, J., and Park, Y., “Coarsening Model of Cavity Nucleation and Thin Film Delamination from Single-Crystal BaTiO<sub>3</sub> with Proton Implantation,” *Physical Review B* 75, 214102, The American Physical Society, June 5, 2007.

### **Full-Paper Peer-Reviewed Conference Proceedings**

Kim, C., Lee, E., **Pyeon, J.**, Ellis, R, and ShakerNia, A., “A Cost Estimate Model for Transportation Management Plan Strategies for Highway Construction Projects,” Proceedings of the Transportation Research Board 92<sup>st</sup> Annual Meeting (CD-ROM), Washington, D.C., January 13-17, 2013.

**Pyeon, J.** and Zomoradi, M., “Incentive/Disincentive Project Success Factors During MacArthur Maze I-580 Bridge Span Replacement,” Proceedings of the 5<sup>th</sup> International Conference of Construction Engineering Management, Garden Grove, California, USA, January 9-12, 2013.

**Pyeon, J.** and Ellis, R., “Key Project Factors of Construction Time and Cost Performance during Incentive/Disincentive Highway Projects,” Proceedings of the Transportation Research Board 91<sup>st</sup> Annual Meeting (CD-ROM), Washington, D.C., January 22-26, 2012.

Choi, K., Lee, E., Kwak, Y. and **Pyeon, J.**, “Optimal Incentive/Disincentive Predictive Model for Highway Rehabilitation Projects,” Proceedings of the 2<sup>nd</sup> International Conference on Transportation Construction Management, the US Department of Transportation and the Federal Highway Administration, Orlando, FL, February 7-10, 2011.

Ellis, R., **Pyeon, J.**, Choi, K., and Park, M., “Pit Proctor Utilization for Construction of Pavement Base Materials in the FDOT Construction Process,” Proceedings of the 2<sup>nd</sup> International Conference on Transportation Construction Management, the US Department of Transportation and the Federal Highway Administration, Orlando, FL, February 7-10, 2011.

Choi, K., Ibbs, C., and **Pyeon, J.**, “Alternative Contracting Strategies for Rebuilding Aging Infrastructure: Are They Really Effective?” Proceedings of the 4<sup>th</sup> International Public Procurement Conference, Paper 2-2, South, Korea, August 26-28, 2010.

Park, T., Park, S., **Pyeon, J.**, Kim, M., and Choo, C., “Sustainability and Technology Management,” Proceedings of the 2010 International Conference on Asia Pacific Business Innovation and Technology Management, ISSN: 2094-506X, Beijing China, July 25-27, 2010.

Kim, C., Kang, L, and **Pyeon, J.**, “Development of the 3D Computer System to Quantify Automatically Construction and Demolition Waste,” Proceedings of the 5<sup>th</sup> International Conference on Construction in the 21<sup>st</sup> Century: Collaboration and Integration in

Engineering Management and Technology, p. 1242-1248, Istanbul, Turkey, May 20-22, 2009.

**Pyeon, J.**, Ellis, R., Minchin, E., and Glagola, C., “Traffic Impact on Project Time Performance during Incentive Construction Projects,” Proceedings of the 1<sup>st</sup> International Conference on Transportation Construction Management (CD-ROM), the US Department of Transportation and the Federal Highway Administration, Orlando, FL, February 10-12, 2009.

Minchin, E., Ellis, R., **Pyeon, J.**, and Herbsman, Z., “Use of Innovative Contracting Methods by DOTs - Project Managers Speak,” Proceedings of the 1<sup>st</sup> International Conference on Transportation Construction Management (CD-ROM), the US Department of Transportation and the Federal Highway Administration, Orlando, FL, February 10-12, 2009.

**Pyeon, J.** and Ellis, R., “Project Time Performance Comparison During FDOT Highway Construction: Traditional Design-Bid-Build Versus Incentive Contracting,” Proceedings of the Transportation Research Board 88<sup>th</sup> Annual Meeting (CD-ROM), Washington, D.C., January 11-15, 2009.

**Pyeon, J.** and Ellis, R., “Application of Advanced Materials and Emerging Technologies in Highway Construction: Best Techniques to Remove Pavement Markings,” Proceedings of the 4th International Symposium on the Marine Biotechnology and Advanced Materials, Marine Bio and Advanced Material Cluster Center, p. 185-191, Gangneung, Korea, June 12-13, 2008.

Lee, J., Ellis, R., and **Pyeon, J.**, “Proposed Methodology for Dynamic Schedule Compression,” Proceedings of the 3<sup>rd</sup> Annual IEEE Conference on Automation Science and Engineering, TuRP-C04.2, p. 986-991, Scottsdale, AZ, September 22-25, 2007.

Ellis, R. and **Pyeon, J.**, “Development of Improved Procedures for Removing Temporary Pavement Markings during Highway Construction,” Proceedings of the Transportation Research Board 85<sup>th</sup> Annual Meeting (CD-ROM), Paper #06-2545, Washington, D.C., January 22-26, 2006.

Ellis, R. and **Pyeon, J.**, “Schematic Approach to Improve Time Performance of Highway Construction Contracts,” Proceedings of the 1<sup>st</sup> International Conference of Construction Engineering Management, p. 638-642, Seoul, Korea, October 16-19, 2005.

Ellis, R. and **Pyeon, J.**, “A Study of Simulation-Based Contract Incentives and Disincentives Usage,” Proceedings of the 2005 Construction Research Congress, American Society of Civil Engineers, p. 527-531, San Diego, CA, April 5-7, 2005.

### **Peer-Reviewed Technical Reports**

**Pyeon, J.** and Lee, E., “Systematic Procedures to Determine Incentive/Disincentive Dollar Amounts for Highway Transportation Construction Projects,” Report No.: CA-MTI-12-2908, Mineta Transportation Institute, San Jose, CA, June 2012.

**Pyeon, J.**, Lee, E., Ellis, R. and Park, T., “Cost Estimate Modeling of Transportation Management Plans for Highway Projects,” Report No.: CA-MTI-12-1007, Mineta Transportation Institute, San Jose, CA, May 2012.

**Pyeon, J.** and Park, T., “Improving Transportation Construction Project Performance: Development of a Model to Support Decision-Making Process for Incentive/Disincentive Construction Projects,” Report No.: CA-MTI-10-2801, Mineta Transportation Institute, San Jose, CA, March 2010.

### Technical Reports

Cho, Y., Kabassi, and **Pyeon, J.**, “Effectiveness Study on Temporary Pavement Marking Removals Methods,” Report No.: SPR-P1 (11) M305, Nebraska Transportation Center, Nebraska Department of Roads, Lincoln, NE, June 2011.

Ellis, R., **Pyeon, J.**, Herbsman, Z., Minchin, E., and Molenaar, K., “Evaluation of Alternative Contracting Techniques on FDOT Construction Projects,” Final Report FDOT BDC51, The Florida Department of Transportation, Tallahassee, FL, July 2007.

### Magazine Publications

**Pyeon, J.** and Jung, W., “Effectiveness Study of Various Pavement Marking Removal Methods,” *Magazine of the Korea Institute for Structural Maintenance and Inspection*, Korea Institute for Structural Maintenance and Inspection, Vol. 16, No.1, Serial No. 71, pp. 37-44, June 2012.

**Pyeon, J.**, “Innovative Contracting Techniques for Highway Construction Projects: Incentive/Disincentive Provisions,” *Construction Engineering and Management Magazine*, KICEM, v.11, no.4 (2010-08), pp.51-55, ISSN: 1229-7534, August 2010.

**Pyeon, J.**, Kim, C., and Ellis, R., “Civil and Coastal Engineering Programs at the University of Florida,” *Civil Engineering Magazine*, Korean Society of Civil Engineers, v.55, no.3, pp.63-79, 2007.

### Abstract Peer-Reviewed Conference Proceedings

**Pyeon, J.**, Lee, E., and Kim, C., “Systematic Strategy Selection Model Framework for Caltrans Traffic Management Plans,” Proceedings of the US-Korea Conference on Science, Technology, and Entrepreneurship (CD-ROM), The Symposium of Civil and Environmental Engineering, Korean-American Scientists and Engineers Association, Los Angeles, CA, August 9 – 11, 2012.

**Pyeon, J.**, Lee, E., and Hannigan, M., “Evaluation of Incentive/Disincentive Dollar Amounts for Highway Construction Projects,” Proceedings of the US-Korea Conference on Science, Technology, and Entrepreneurship (CD-ROM), The Symposium of Civil and Environmental Engineering, Korean-American Scientists and Engineers Association, Los Angeles, CA, August 9 – 11, 2012.

**Pyeon, J.**, Choi, K., Park, M., and Kim, S., “Simulation Model to Predict Project Time and Cost Performance of Incentive/Disincentive Construction Projects,” Proceedings of the 28<sup>th</sup> International Symposium on Automation and Robotics in Construction, Paper No. S18-4, p. 615-616, Seoul, Korea, June 29 – July 2, 2011.

Choi, K., Chung, K., Park, E., and **Pyeon, J.**, “Stochastic Modeling for Quantifying Optimal Incentive Amounts of Early Project Completion,” Proceedings of the 28<sup>th</sup> International Symposium on Automation and Robotics in Construction, Paper No. S6-7, p. 225-226, Seoul, Korea, June 29 – July 2, 2011.

**Pyeon, J.** and Zomorodi M., “Incentive/Disincentive Contracting Case Study in California: Reconstruction at the Route 580/880 Separation,” Proceedings of the US-Korea Conference on Science, Technology, and Entrepreneurship (CD-ROM), The Symposium of Civil and Environmental Engineering, Korean-American Scientists and Engineers Association, San Diego, CA, August 14-17, 2008.

**Pyeon, J.** and Ellis, R., “Impact of Incentive Contracting Methods on Highway Construction Project Time Performance,” Proceedings of the US-Korea Conference on Science, Technology, and Entrepreneurship (CD-ROM), The Symposium of Civil and Environmental Engineering, Korean-American Scientists and Engineers Association, Teaneck, NJ, August 10-13, 2006.

### **Journal Articles in Progress**

**Pyeon, J.**, Ellis, R., Choi, K., Lee, D., and Kim, C. “Contractor’s Project Time & Cost Performance Evaluation during Highway Construction: Incentive Contracting versus Non-Incentive Contracting,” *KSCE Journal of Civil Engineering*, Accepted with revision, ISSN 1226-7988.

**Pyeon, J.**, Ellis, R., Minchin, R., and Park, T. “Decision Support Model to Predict Project Time and Cost Performance of Incentive/Disincentive Highway Construction Projects,” Submitted for publication to *Journal of Construction Engineering and Project Management* (Under review), August 2011.

**Pyeon, J.**, Ellis, R., Minchin, R., and Park, T. “Factors That Affect Project Time and Cost Performance during Highway Construction Using Incentive/Disincentive Provisions,” Submitted for publication to *Journal of Construction Engineering and Project Management* (Under review), February 2011.

Lee, E., **Pyeon, J.**, and Kim, C., “Systematic Procedures for Optimum Incentive/Disincentive Dollar Amounts for Hot-Mix Asphalt Highway Rehabilitation Projects,” Manuscript in Progress, Target Journal: *Transportation Research Record*

## **PRESENTATIONS**

### **Invited Presentations**

Pyeon, J. (July 4, 2011). “Building Information Modeling Practices in the United States,” Invited Presentation in Korea Institute of Construction Engineering Management, CEM Forum, KICEM, Seoul, Korea.

Pyeon, J. (June 24, 2011). “Building Information Modeling to Improve Project Planning, Design, and Construction,” Invited Lecture in the Construction Engineering and Management Program, Department of Architecture, Seoul National University, Seoul, Korea.

Pyeon, J. (September 21 – 22, 2010). “CA4PRS Application for Determination of Incentive/Disincentive Dollar Amount,” Invited Workshop Presentation in Federal Highway Administration CA4PRS Peer Exchange Workshop, St. Louis, MO.

Pyeon, J. (May 19 – 21, 2010). “Systematic Procedures to Determine Incentive/Disincentive Dollar Amounts for Highway Transportation Construction Projects,” Invited Poster

Presentation in Transportation Research Board Conference on Surface Transportation Finance: Forging a Sustainable Future, New Orleans, Louisiana.

Pyeon, J. (June 2008). "Application of Advanced Materials and Emerging Technologies in Highway Construction: Best Techniques to Remove Pavement Markings," Paper presented at the 4th International Symposium on the Marine Biotechnology and Advanced Materials, Marine Bio and Advanced Material Cluster Center, Gangneung, Korea.

### **Conference Presentations**

Pyeon, J. (January 2013). "Incentive/Disincentive Project Success Factors during MacArthur Maze I-580 Bridge Span Replacement," Paper presented at the 5<sup>th</sup> International Conference of Construction Engineering Management, Garden Grove, CA.

Pyeon, J. (August 2012). "Systematic Strategy Selection Model Framework for Caltrans Traffic Management Plans," Paper presented at the 5<sup>th</sup> International Conference of Construction Engineering Management, Garden Grove, CA.

Pyeon, J. (January 2012). "Key Project Factors of Construction Time and Cost Performance during Incentive/Disincentive Highway Projects," Paper presented at the Transportation Research Board 91<sup>st</sup> Annual Meeting, Washington, D.C.

Pyeon, J. (June 2011). "Simulation Model to Predict Project Time and Cost Performance of Incentive/Disincentive Construction Projects," Paper presented at the 28<sup>th</sup> International Symposium on Automation and Robotics in Construction, Seoul, Korea.

Pyeon, J. (June 2011). "Stochastic Modeling for Quantifying Optimal Incentive Amounts of Early Project Completion," Paper presented at the 28<sup>th</sup> International Symposium on Automation and Robotics in Construction, Seoul, Korea.

Pyeon, J. (February 2011). "Pit Proctor Utilization for Construction of Pavement Base Materials in the FDOT Construction Process," Paper presented at the 2<sup>nd</sup> International Conference on Transportation Construction Management, the US Department of Transportation and the Federal Highway Administration, Orlando, FL.

Pyeon, J. (February 2009). "Traffic Impact on Project Time Performance during Incentive Construction Projects," Paper presented at the 1st International Conference on Transportation Construction Management, the US Department of Transportation and the Federal Highway Administration, Orlando, FL.

Pyeon, J. (January 2009). "Project Time Performance Comparison During FDOT Highway Construction: Traditional Design-Bid-Build Versus Incentive Contracting," Paper presented at the Transportation Research Board 88<sup>th</sup> Annual Meeting, Washington, D.C.

Pyeon, J. (November 2008). "Temporary Pavement Marking Removal," The 3rd KSEA Northwest Regional Conference, Korean-American Scientists and Engineers Association, Sacramento, CA.

Pyeon, J. (August 2008). "Incentive/Disincentive Contracting Case Study in California: Reconstruction at the Route 580/880 Separation," Paper presented at the Symposium of Civil and Environmental Engineering, The US-Korea Conference on Science,

Technology, and Entrepreneurship, Korean-American Scientists and Engineers Association, San Diego, CA.

Pyeon, J. (August 2006). "Impact of Incentive Contracting Methods on Highway Construction Project Time Performance," Paper presented at the Symposium of Civil and Environmental Engineering, The US-Korea Conference on Science, Technology, and Entrepreneurship, Korean-American Scientists and Engineers Association, Teaneck, NJ.

Pyeon, J. (January 2006). "Development of Improved Procedures for Removing Temporary Pavement Markings during Highway Construction," Paper presented at the Transportation Research Board 85<sup>th</sup> Annual Meeting, Washington, D.C.

Pyeon, J. (April 2005). "A Study of Simulation-Based Contract Incentives and Disincentives Usage," Paper presented at ASCE Construction Research Congress: Broadening Perspectives, San Diego, CA.

### **GRANTS AWARDED**

#### **Competitive External Research Grants**

**Pyeon, J.**, Lee, E., Ellis, R. and Park, T., *Cost Estimate Modeling of Transportation Management Plan for Highway Projects*, August 1, 2010 – May 31, 2012

Award of **\$81,770**: Sponsored by the US Department of Transportation and the California Department of Transportation through the Mineta Transportation Institute. It was approved after passing through several levels of peer review.

Cho, Y. and **Pyeon, J.**, *Effectiveness Study on Temporary Pavement Marking Removal Methods*, July 1, 2010 – June 30, 2011

Award of **\$67,764**: Sponsored by the Nebraska Department of Roads. It was approved by the Nebraska Department of Roads after passing through several levels of peer review.

**Pyeon, J.** and Lee, E., *Systematic Procedures to Determine Incentive/Disincentive Dollar Amount for Highway Transportation Construction Projects*, September 1, 2009 – June 15, 2012

Award of **\$49,886**: Sponsored by the US Department of Transportation and the California Department of Transportation through the Mineta Transportation Institute. It was approved after passing through several levels of peer review.

**Pyeon, J.**, *Improving Transportation Construction Project Performance: Development of a Model to Support Decision-Making Process for Incentive/Disincentive Construction Projects*, September 1, 2008 – October 31, 2009

Award of **\$70,739**: Sponsored by the US Department of Transportation and the California Department of Transportation through the Mineta Transportation Institute. It was approved after passing through several levels of peer review.

Ellis, R., **Pyeon, J.**, Hersbman, Z., Minchin, E., and Molenaar, K., *Evaluation of Alternative Contracting Techniques on FDOT Construction Projects*, March 15, 2006 – May 14, 2007

Award of **\$146,718** from the Florida Department of Transportation. This research required an extensive data collection process of completed construction projects for the last 10 years from several divisions of central and district offices. I was responsible for literature review, both data collection and analysis, and writing the final report of this research.

## **CSU/SJSU Research Grants**

**Pyeon, J.**, *Effective Removal of Pavement Markings: Chemical Removal Techniques*, June 14, 2010 – August 6, 2010

Award of **\$4,000**: Sponsored by SJSU STEM Research Grant

**Pyeon, J.**, *Framework for Development of a Systematic Model for Quality Control Process of Pavement Base Materials*, May 2010 – August 2010

Award of **\$5,000**: College of Engineering, SJSU for Faculty Career Development.

**Pyeon, J.**, *Evaluation of Incentive/Disincentive Amount to Improve Highway Construction Project Time Performance*, May 2009 – August 2009

Award of **\$5,000**: College of Engineering, SJSU for Faculty Career Development.

**Pyeon, J.**, *Development of a Decision Support Model for Highway Construction Incentive Contracting Projects*, AY 2008-2009

Award of **\$4,571** from the San Jose State University for Junior Faculty Career Development.

**Pyeon, J.**, *A Comparison of Traditional Design-Bid-Build versus Incentive Contracting in Highway Construction Time Performance*, May 2008 – August 2008

Award of **\$5,000**: College of Engineering, SJSU for Faculty Career Development.

**Pyeon, J.**, *Development of a Methodology to Evaluate Incentive Contracting Techniques for Caltrans Construction Projects*, AY 2007-2008

Award of **\$6,236** from the California State University Research Funds Committee.

## **HONORS AND AWARDS**

2012 Charles W. Davidson Professorship Award, Civil and Environmental Engineering, San Jose State University (Fall 2012)

2012 Charles W. Davidson Professorship Award, Civil and Environmental Engineering, San Jose State University (Spring 2012)

2011 Charles W. Davidson Professorship Award, Civil and Environmental Engineering, San Jose State University (Fall 2011)

2010 Charles W. Davidson Professorship Award, Civil and Environmental Engineering, San Jose State University (Spring 2010)

2009 Charles W. Davidson Professorship Award, Civil and Environmental Engineering, San Jose State University (Spring 2009)

William W. Lorell Faculty Development Award for AY 2008-2009, Civil and Environmental Engineering, San Jose State University (May 2008)

2008 Charles W. Davidson Professorship Award, Civil and Environmental Engineering, San Jose State University (January 2008)

The 26<sup>th</sup> National Dean's List (2003-2004)

Chi Epsilon National Civil Engineering Honor Society

## **PROFESSIONAL SERVICES**

University Representative, Transportation Research Board, Washington, D.C.

Research Review Panel, Work Zone Road User Costs, Office of Operations, Federal Highway Administration, Washington, D. C.

External Reviewer of Research, Center for Multimodal Solutions for Congestion Mitigation, U.S. Department of Transportation Tier 1 University Transportation Center, Gainesville, FL.

Research Associate, Mineta Transportation Institute, San Jose, CA.

Session Chair, Architecture and Planning, *The 28<sup>th</sup> International Symposium on Automation and Robotics in Construction*, ISARC 2011.

Reviewer, *Journal of Construction Engineering and Project Management*, KICEM.

Reviewer, *Journal of Construction Engineering and Management*, American Society of Civil Engineers.

Reviewer, *Journal of Civil Engineering*, Korean Society of Civil Engineers.

Reviewer, *Automation in Construction*, The 3<sup>rd</sup> Annual IEEE Conference on Automation Science and Engineering.

Reviewer, Ubiquitous Information Technology for Enhanced Mobile Systems, *International Information Institute*

Regional Conference Organizer, The 18th Annual South-Western Regional Technology Conference, Korean-American Scientists and Engineers Association, California Institute of Technology, Pasadena, CA. (February 2008)

## **PROFESSIONAL AFFILIATION**

Member of ASCE Construction Research Council

Member of American Society of Civil Engineers

Member of Construction Institute

Member of Korean-American Scientists and Engineers Association

Member of Korea Institute of Construction Engineering and Management

Member of the Associated General Contractors of America