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I. EARNED DEGREES

- Ph.D. (2005) "Spatial Variability in Soils: Stiffness and Strength," Division of Geosystems Engineering, School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia
- M.S. (1999) "Engineering Characteristics of Soft Ground at Incheon International Airport," Division of Geotechnical Engineering, Department of Civil Engineering, Seoul National University, Seoul, Korea
- B.S. (1997) Department of Civil Engineering, Seoul National University, Seoul, Korea

II. EMPLOYMENT

- 2007~Present Assistant Professor, Kookmin University
- 2007~2007 Geotechnical Project Engineer, GeoComp Corporation
- 2005~2007 Research Associate, Georgia Institute of Technology

III. TEACHING EXPERIENCES

Course Instruction at Kookmin University

- Graduate Courses: Digital Signal Processing in Civil Engineering Applications, Soils and Waves, Advanced Soil Mechanics, In-Situ Testing, Numerical Methods in Soil Mechanics
- Undergraduate Courses: Soil Mechanics, Soft Ground Engineering, Introduction to Engineering Design, Programming Practice in Civil Engineering, Earth Science in Civil Engineering, Capstone Design in Civil Engineering, Understanding of Overseas Construction Industry

Course Instruction at Georgia Tech

- Instruction, Civil Engineering Materials (CEE 3020, Fall 2005)
- New Course development and instruction, Geotechnical Aspects of Resource Recovery (CEE 8813, Spring 2007)

Awards

- Best Teacher 2010, Section: Engineering School, Course name: Introduction to Engineering Design, Kookmin University
- National Award for Best Engineering Lecture Note 2009, Section: Construction Engineering, Korean Society for Engineering Education

IV. PROFESSIONAL EXPERIENCES

Research Administration at Kookmin University (2007~2010):

- Engineering Evaluation of swelling potential of clayey soils in Algeria, Dong-Myung Enc.
- The study of new geotechnical design concepts considering spatial variability in soils, The national research foundation of Korea
- Reliability assessment of geotechnical testing results, Urban Regeneration Agency

Professional Consulting at GeoComp Corporation (2007):

- Performance evaluation of geotextile-reinforced pavement/subgrade base
- Full-scale pavement evaluation

Research Administration at Georgia Institute of Technology (2005~2006):

- Engineering assessment of material uncertainties in geomechanics (Supported by NSF)
- Performance of inverted base pavement (Supported by GCAA)
- Flow test evaluation (Supported by Georgia DOT)
- Seismic CPTu consulting, South Carolina (Clinet: ECS)
- Dike stability evaluation-Lagunillas, Venezuela (Clinet: PDVSA)

V. PUBLICATIONS

Journal Papers

- Kim, H.-S., Kim, H.-K*, Shin, S.-Y., Chung, C.-K., (2011) "Application of Statistical Geo-Spatial Information Technology to Soil Stratification", Korean Geotechnical Society Journal, Vol. 27, No. 7, 59-68
- Yoon, H.-K., Lee, C.-H., Kim, H.-K, and Lee, J.-S*, (2011) "Evaluation of preconsolidation stress by shear wave velocity", Smart Structures and Systems, Vol. 7, No. 4, 275-287
- Kim, H.-K.* and Santamarina, J.C., (2008) "Spatial Variability: Drained and Undrained Deviatoric Load Response," Géotechnique, Vol. 58, Issue 8, 805-814
- Kim, H.-K. and Santamarina, J.C.*, (2008) "Sand-Rubber Mixtures (Large Rubber Chips)," Canadian Geotechnical Journal, Vol. 45, 1457-1466
- Cortes, D., Kim, H.-K.*, Palomino, A.M. and Santamarina, J.C., (2008) "Rheological and Mechanical Properties of Mortars Prepared With Natural and Manufactured Sands," Cement and Concrete Research, Vol. 38, pp. 1142-1147
- Kim, H.-K.*, Cortes, D. and Santamarina, J.C., (2007) "Flow Test: Particle-level and Micro-scale Analysis," ACI materials journal, Vol. 104, No. 3, 323-327
- Kim, H.-K*. and Santamarina, J.C., "The Effects of Spatially Varying Small-Strain Stiffness on K0-loading," Canadian Geotechnical Journal (Under Review)
- Kim, H.-S., Kim, H.-K*, Shin, S.-Y., Chung, C.-K., "Application of Statistical Geo-Spatial Information Technology to soil Stratification in the Seoul metropolitan area," Georisk (Under Review)

(* indicates the corresponding author)

Conference Papers

- Kim, H.-K. and Kim, J.-Y. (2010) "Meso-scale heterogeneity effects on excess pore water pressure dissipation", GeoFlorida 2010, Advances in Analyses, Modeling and Design, West Palm Beach, FL, USA
- Kim, H.-K. (2009) "Statistical estimation of spatially varying geotechnical properties for field applications", IAMG09, International Association for Mathematical Geosciences, Stanford University
- Kim, H.-K. and Santamarina, J.C., (2008) "Spatial heterogeneity effects on K_0 loading," Proceedings, International Symposium on Deformation Characteristics of Geomaterials, 2008 IS-Atlanta, GA
- Truong, Q.H., Kim, H.-K., and Lee, J.-S., (2008) "Effects of spatial heterogeneity on elastic wave propagation in soils," Proceedings, International Conference on Advances in Structural Engineering and Mechanics, Jeju, Korea
- Kim, H.-K., Narsilio, G.A. and Santamarina, J.C. (2007), "Emergent Phenomena in Spatially Varying Soils," Proceedings, GeoDenver 2007, ASCE Geo-institute Conference, Denver, CO
- Kim, H.-K. and Santamarina, J.C. (2006), "Footprints: The Role of Particle Characteristics," Proceedings, ASCE Earth and Space 2006 Conference, League City/Houston, TX
- Kim, H.-K. and Santamarina, J.C. (2006), "The Effect of Spatial Variability on Soil Behavior: Load-Deformation Response," Proceedings, GeoCongress 2006, ASCE Geo-institute Conference, Atlanta, GA