INJOONG KIM

3263 Flowers Road #I, Atlanta GA 30341 • 770-458-9368 gtg200c@prism.gatech.edu • http://injoong_kim.tripod.com

EDUCATION

 <u>Ph.D. Candidate, Georgia Tech, Atlanta, Georgia (2002-Present)</u>
Major: Mechanical Engineering (CAE / CAD / CAM)
Minor: Computer Science
Research Topic: Development of a Knowledge Model for Computer-Aided Design for Reliability of Electronic Packaging Systems

M.S., Yonsei University, Seoul, South Korea (1994-1995) Major: Mechanical Engineering (Design / Manufacturing) Research Topic: High Performance Ball Screw Design

B.S., Yonsei University, Seoul, South Korea (1990-1993) Major: Mechanical Engineering

RESEARCH AND WORK EXPERIENCES

<u>Graduate Research Assistant, Georgia Tech, Atlanta, Georgia (2002-Present)</u> Developed XML-Based Composable Objects for Systems Engineering [NASA] Metrics for Measuring Degree of Openness of PLM Environments [IBM] Next-Generation Design-for-Manufacturability (DFM) Frameworks [RCI] Knowledge-based FEA Systems for Chip Packing Systems [SHINKO]

<u>Developer, Orominfo, Daejon, South Korea (2000-2001)</u> Developed PARAGON: A Web-based Components & Suppliers Management System

Engineer, Samsung Heavy Industries, Daejon, South Korea (1996-2000) Developed Electronic Approval Systems of Ship Structure Using STEP Excavators Dynamic Simulators Cooling Fans Performance Simulators

Graduate Research Assistant, Yonsei University, Seoul, South Korea (1994-1995) Developed High Performance Ball Screws

HONORS AND AWARDS

Robert E. Fulton Best Paper Award, 25th Computers and Information in Engineering Conference in 2005 (09/26/2005)

Best Paper in Session 210: Factory Simulation, Automation & Integration, 28th International Electronics Manufacturing Technology Symposium in 2003 (07/18/2003)

Third Place, Technical Part Contest, Samsung Heavy Industries in 1997

The Excellent Student Award, Yonsei University in 1995

PUBLICATIONS

<u>Journals</u>

Injoong Kim, Raghuram V. Pucha, Russell S. Peak, Suresh K. Sitaraman,"Reliability Object Model: A System Design for Reliability Framework," IEEE Transactions on Reliability (In Progress)

Injoong Kim, Chulwoo Park, Sangjo Lee, "The study on the stiffness of ball screws considering manufacturing allowance," Journal of Korean Society of Mechanical Engineering, Vol. 22-5, 1998, pp. 843-849.

Conferences

Injoong Kim, Suresh Sitaraman, Russell Peak, "Reliability Objects: A Knowledge Representation of System Design for Reliability," ASME IMECE 2005, IMECE2005-79934.

Injoong Kim, Manas Bajaj, Nsikan Udoyen, Greg Mocko, Russell Peak, Miyako Wilson, "Metrics for Degree-of-Openness of Engineering Information (Recognizing the value of standards in use - Part 2)" ASME CIE 2005, DETC2005-84791. (Robert E. Fulton Best Paper Award)

Manas Bajaj, Injoong Kim, Greg Mocko, Russell Peak, Nsikan Udoyen, Miyako Wilson, D. Greene, B. Raines, V. Srinivasan, "Diagnosing Engineering Information Interoperability (Recognizing the value of standards in use - Part 1)," ASME CIE 2005, DETC2005-85020.

Russell Peak, Sandy Friedenthal, Alan Moore, Roger Burkhart, Steve Waterbury, Manas Bajaj, Injoong Kim, "Experiences Using SysML Parametrics to Represent Constrained Object-based Analysis Templates," 2005 Aerospace Product Data Exchange Workshop, Georgia Institute of Technology, Atlanta, Georgia.

Manas Bajaj, Russell Peak, Miyako Wilson, Injoong Kim, Tomas Thurman, M.C. Jothishankar, Mike Benda, Placid Ferreira, James Stori, "Towards, Next-Generation Design-for-Manufacturability (DFM) Frameworks for Electronics Product Realization," IEMT of IEEE/CPMT/SEMI, Semicon West 2003, San Jose, California. (Best Paper in Session 210)

Russell Peak, Manas Bajaj, Miyako Wilson, Injoong Kim, Thomas Thurman, Mike Benda, M.C. Jothishanker, Placid Ferreira, Jami Stori, Deepkishore Mukhopadhyay, Dong Tang, Giedrius Litutkus, Lothar Klein, "Enhancing Design-for-Manufacturability Using the ISO 10303 Standard for Electronics Design: AP210," 2003 Aerospace Product Data Exchange Workshop, NIST, Gaithersburg, Maryland.

Russell Peak, Miyako Wilson, Injoong Kim, Nsikan Udoyen, Manas Bajaj, Greg Mocko, Giedrius Liutkus, Lothar Klein, Mike Dickerson, "Creating Gap-Filling Applications Using STEP Express, XML, and SVG-Based Smart Figures – An Avionics Example," 2002 NASA-ESA Workshop on Aerospace Product Data Exchange, The Netherlands.

Ryuichi Matsuki, Russell Peak, Sai Zeng, Miyako Wilson, Injoong Kim, Manas Bajaj, "Design-Analysis (Thermal and Mechanical) Integration Research for Electronic Packaging," RATS of Japan Institute of Electronics Packaging Symposium, September 2002.

Injoong Kim, Chulwoo Park, Sangjo Lee, "The Design of Ball Screws for Optimum Performance," Proceedings of the Pacific Conference on Manufacturing, October 1996.

Injoong Kim, Chulwoo Park, Sangjo Lee, "The study on the efficiency of ball screws determining friction coefficient," Journal of Korean Society of Mechanical Engineering Spring Proceedings, April 1996.

TECHNICAL SKILLS

- CAE Tools: ANSYS and DADS
- CAD Tools: Pro-E
- Programming Languages: Java, C++, ASP, C, and VB
- DBMSs: Oracle, MySQL, and MS Access
- STEP Tools: LKSoft STEP Book, and EDM
- Miscellaneous: XML, UML, EXPRESS, SQL, and HTML

REFERENCES

- Dr. Sitaraman, Professor at Georgia Tech. suresh.sitaraman@me.gatech.edu
- Dr. Peak, Senior Scientist at Georgia Tech. russell.peak@marc.gatech.edu
- Dr. C. P. Wong, Professor at Georgia Tech. cp.wong@mse.gatech.edu
- Dr. Sang Jo Lee, Professor at Yonsei University sjlee@yonsei.ac.kr
- Dr. Soon Hung Han, Professor at KAIST shhan@kaist.ac.kr