WCECS 2013 Keynote Speaker I:

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Speech Title:
Architecture for Adaptive Mobile Applications

Abstract:

Mobile computing is a relatively new field. While the challenges arising from mobility and the limitations of the portable devices are relatively well understood, there is no consensus yet as to what should be done to address these challenges. A comprehensive solution has to address many different aspects, such as the issue of dynamically changing bandwidth, the power, computational, and other limitations of the portable devices, or the varying availability of services in different environments.

In this talk, I will present our architecture for such adaptive mobile applications. I motivated the architecture by classifying likely mobile applications and identified common properties. The architecture intends to be more general than previous work with respect to adaptability, flexibility, and user mobility. I have developed various pieces of the overall architecture and collected some preliminary experience with adaptive mobile applications. I will give an overview of the intersection of the areas of software architecture and mobile applications. I will consider the mobile applications, which represents the computing functionality designed to migrate across hardware devices at runtime and execute on mobile hardware platforms, and the

mobile systems, which are computing applications that include mobile software and hardware elements.

About the Speaker:

Dr. Haeng-Kon Kim was a vice President of Research and Information, a dean of engineering college and a professor in the School of IT, Catholic University of Daegu, in Korea. He has been a research staff member in Bell Lab., NASA center and Central Michigan University in U.S.A. He has taught in Central Michigan Univ. in U.S.A. during his Sabbatical (Dec., 20, 2000 ~ Feb., 20, 2002).

Prof. Kim advised 17 Ph.D students and 24 master Degree students in his Laboratory of Catholic Univ. of DaeGu in KOREA. His research interests include following fields: Software Engineering, Mobile Applications Design and Testing, SOA, and Frameworks for U-Healthcare Services.

Prof. Kim is chief editor of KIPS SE-Sig journal and Korea Multimedia Society, an editorial board of KISS (Korea Information Science Society), a steering committee of KIPS (Korea Information Processing Society). He was an organization committee (publicity chair) of ACIS and SEITI at CMU in U.S.A. He is also a president of SERSC in Australia. He is also a committee member of WCECS.