## THE CHINESE UNIVERSITY OF HONG KONG

## Department of Statistics

will present a seminar entitled

## Research and Applications of Virtual Medicine

by

Professor Pheng Ann Heng
Department of Computer Science & Engineering
The Chinese University of Hong Kong

on

Tuesday, 16 October 2007 2:00pm – 3:00pm

in

Lady Shaw Building C5
The Chinese University of Hong Kong

## **Abstract:**

The main focus of virtual medicine is to develop and deliver virtual reality based training and computer enhanced learning in medicine. Traditionally, medical students learn diagnostic, therapeutic and surgical skills through difficult clinical training on patients. With the change in the health economics, the advances of minimal invasive surgery and shortening of hospitalization time, source and availability of patient for teaching become a major problem. Advanced technologies such as virtual reality and visualization can help to make the learning process more efficient, engaging and flexible. It is possible to construct immersive environments to provide realistic visualization and haptic feedbacks for anatomy education and surgical training. In this talk, I would like to share our experience in developing several virtual medicine applications, including virtual surgery, virtual anatomy, virtual acupuncture and Chinese visible human research.

Dr. Pheng Ann Heng received his B. Sc. from National University of Singapore in 1985. He received his M. Sc (Computer Science), M. Art (Applied Math) and Ph. D. (Computer Science) all from the Indiana University of USA in 1987, 1988 and 1992 respectively.

He is currently a professor of the Department of Computer Science and Engineering at The Chinese University of Hong Kong. In 1999, he set up the Virtual Reality, Visualization and Imaging Research Centre at CUHK and serves as the Director of the centre.

His research interests include virtual reality applications in medicine, scientific visualization, medical imaging, user interface, rendering and modeling, interactive graphics and animation.

All are Welcome