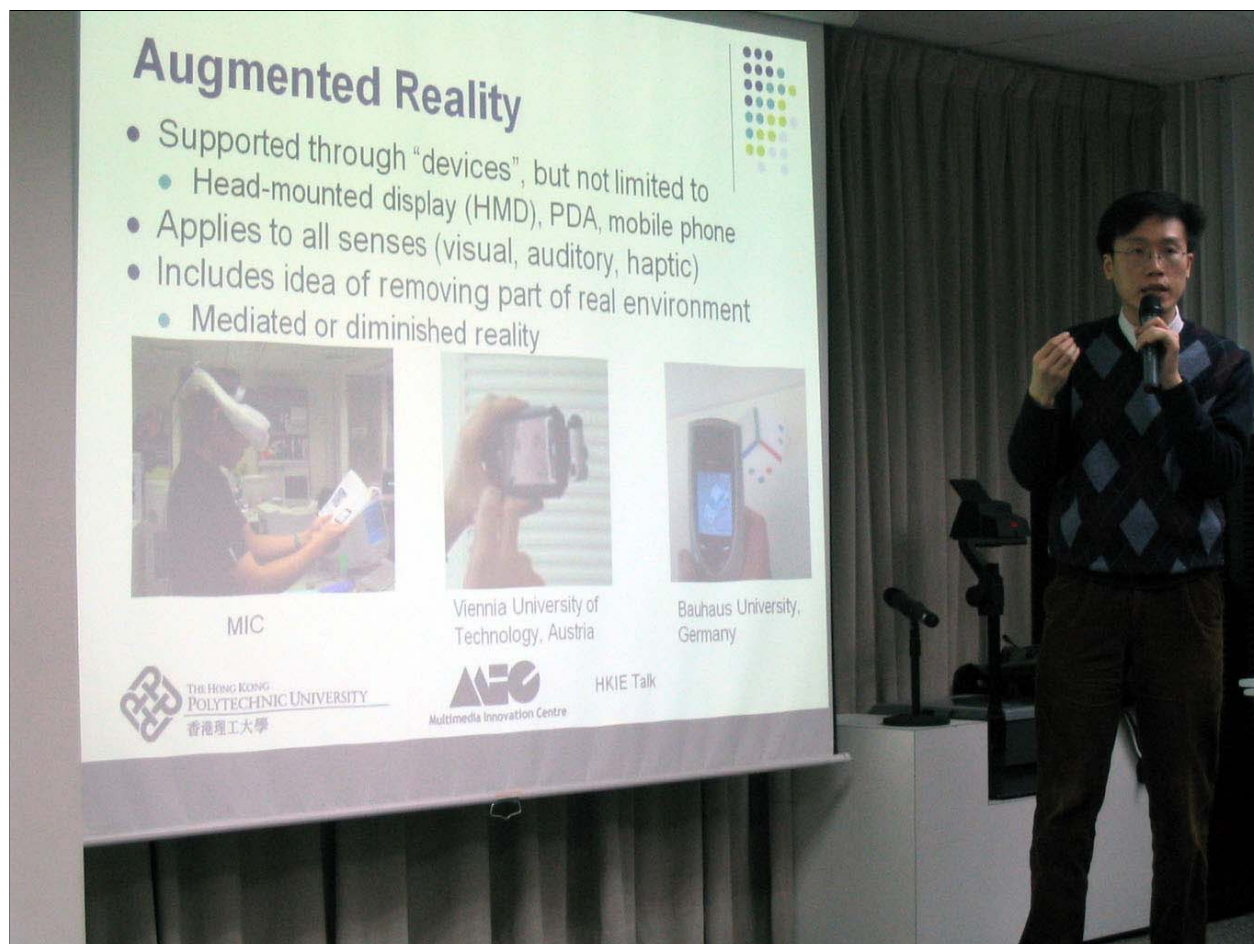


HKIE Electronics Division Activity Report

Augmented Reality and Mixed Reality



Dr Clifford Choy was presenting the AR and MR Seminar

On 22 February, 2005, the EN division organized a technical seminar on "Augmented Reality and Mixed Reality". The guest speaker, Dr Clifford Choy, lecturer and leader of the Embedded Systems Section, Multimedia Innovation Centre, The Hong Kong Polytechnic University, gave a talk on the latest development of the topic.

Dr Choy commenced the talk with the definitions of Virtual Reality/Environments and Augmented Reality as well as the distinction between them. After that, an overview of Augmented Reality, AR, and Mixed Reality, MR, was presented. The implementation of AR and MR, apart from the requirement of sophisticated computers, had to be supported by appropriate visual, auditory or haptic sensing technologies. Conventional systems equipped with head mounted displays to provide visual senses were mostly used in interactive games.

With the development of enabling technologies, especially the increase in the processing power of portable computing devices, e.g., PDA and mobile phone, AR and MR lend themselves to many new and interesting applications since the equipment is convenient enough to be hand-carried outdoor. Dr Choy introduced to the audience novel worldwide projects, such as guided tour, education (e.g., on-site visual reconstruction of historical ruins), maintenance, broadcasting, military, and surgery. Research projects of Multimedia Innovation Centre were also briefly described.

To conclude the talk, Dr Choy discussed with the audience the development trend of AR and MR. Some technical issues were also examined

The talk ended with an interactive Q&A session and a souvenir was presented to Dr Choy by Ir. Dr. Ken Lo, Committee Member.



Ir Dr Ken Lo (L), presented the souvenir to the speaker Dr Clifford Choy (R)=
