Software Education in the 21st Century

Roland T. Chin
Hong Kong University of Science & Technology

It is a well recognized fact that economic growth in industrial countries come from three main sources — technical progress, capital, and a well-educated labour force. To maintain our position as, or to become, economic powerhouses in the world, education in science and technology must be emphasized and widespread. Computer education (not just software education) is an important centerpiece.

To train engineers and scientists for the future, we should not narrowly focus our attention just to software education. The traditional computer science curriculum is no longer adequate for today’s needs. Most problems and applications today require integrated solutions involving hardware and software. Our education system should be designed to provide students with a broad background of fundamentals and system approach training involving hardware, software, networking, and communications. I challenge this panel to come up with a sketch of such a curriculum on “software” education for Asia-Pacific in the 21st century.