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The University of Hong Kong and the Hong Kong Observatory jointly organized a Visibility Measurement Method Design Competition for primary and secondary school students

Jointly organized by the Faculty of Engineering, the University of Hong Kong and the Hong Kong Observatory, and supported by Hong Kong Meteorological Society and Community Weather Information Network, a Visibility Measurement Method Design Competition has been held earlier this year. The competition is the first of its kind in Hong Kong. The award presentation ceremony was held today (2012-07-07[Sat]) at Rayson Huang Theatre, The University of Hong Kong.

The objective of the competition is for the enrichment of knowledge in both engineering and meteorology among primary and secondary school students in Hong Kong, and for the exchange of knowledge in the process. The theme is chosen since visibility readings affect our lives silently. Low visibility affects flight and shipping schedules and increases the risk of traffic accidents. The mankind has been trying to understand the factors that affect visibility. Yet, the measurement of visibility alone has become a kind of specialized area of knowledge. To enhance participants' understanding of the various methods of visibility measurement, the University of Hong Kong and the Hong Kong Observatory had organized a series of talks, workshops and visits earlier in the year to familiarize the students with the topic and enable them to be more creative when designing their visibility measurement methods.

Altogether more than 140 students from 16 schools ranging from Primary 4 to Form 6 took part in the competition in 26 groups. The methods varied from simple naked-eye identification of buildings in digital photos, to sophisticated software that does automatic analysis of multiple landmarks that can also compensate for errors in camera positions. They amply demonstrate the students' ability and creative ideas in their application of meteorological measurement and information technology.

In the Award Presentation Ceremony today (2012-07-07[Sat]), Prof. Norman C. Tien, Dean of Faculty of Engineering, The University of Hong Kong, praised students for their engineering creativity in the design and implementation of a wide variety of methods for measuring visibility. The methods have been meticulously designed and tested, software elegantly written, hardware seamlessly integrated with software, and the team work has been elegantly presented. All these show that they are the engineers and scientists of our next

generation.

Mr. Edwin Lai, the Acting Assistant Director of the Observatory, was most impressed by the students' team spirit. "Over the past six months or so, students had to persevere with their outdoor visibility observations, and to cooperate with each other in combining skills in software programming and hardware tool design to devise innovative methods for visibility measurement. This process was not easy at all," he said.

Photo: organizers and supporting organizations of the competition.
From left to right: Dr. Francis C.Y. Tam, Hong Kong Meteorological Society; Mr. Edwin Lai Sau Tak, Acting Assistant Director, Hong Kong Observatory; Prof. Norman C. Tien, Dean, Faculty of Engineering, The University of Hong Kong; Mr. Lo Cheuk Wai, Community Weather Information Network; Mr. Tam Kwong Hung, Hong Kong Observatory; Dr. Wong Ka Yan Ivy, Department of Computer Science, The University of Hong Kong; Dr. Yip Chi Lap, Department of Computer Science, The University of Hong Kong; Prof. Francis C. M. Lau, Department of Computer Science, The University of Hong Kong.

Photo: winning teams in the Junior Category and organizers of the competition

Photo: winning teams in the Senior Category and organizers of the competition

The list of awards of the "Visibility Measurement Method Design Competition" is as follows.

The list can also be found after the Award Presentation Ceremony at:

Junior Category

Champion:

    YPICA Lee Lim Ming College (SUBG)

First Runner-Up:

    Our Lady of China Catholic Primary School (佑華B隊)

Second Runner-Up:

    Our Lady of China Catholic Primary School (佑華A隊)

The Most Creative award:

    YPICA Lee Lim Ming College (SUBG)

The Best Presentation award:

    St. Margaret's Co-Educational English Secondary and Primary School (Visible Team)

Merits:

    Christian Alliance Cheng Wing Gee College (CWGC Team A)

    Christian Alliance Cheng Wing Gee College (Visor)

    Po Leung Kuk Wu Chung College (胡忠第一組)

Senior Category

Champion:

    HKTA Tang Hin Memorial Secondary School (Team C)

First Runner-Up:

    Mu Kuang English School (mukuang)

Second Runner-Up:

    HKTA Tang Hin Memorial Secondary School (Team B)

The Most Creative award:

    Aberdeen Technical School (Mission Invisible)

The Best Presentation award:

    HKTA Tang Hin Memorial Secondary School (Team B)

Merits:

    Carmel Divine Grace Foundation Secondary School (霧中尋主恩)

    HKTA Tang Hin Memorial Secondary School (Team A)