

## **TKU TEAM WON 3 GOLDS, 2 SILVERS, AND 3 BRONZES IN FIRA ROBOWORLD CUP 2010, BANGALORE, INDIA**

The Robotics research team of Dept. of Electrical Engineering has won championships in “FIRA RoboWorld Cup 2010, Bangalore, India.” They have taken the championship in RoboSot section for the 6th time (since 2003). In addition, they got a gold medal in HuroCup walking race, two silvers in penalty kick and shooting, three bronzes in climbing, Marathon, and weight-lifting competitions. In total grade, TKU team share the same top position with another team from Taiwan, Cheng Kung University.

The TKU team was led by Dr. Wong Ching-chang, Professor of Dept. of Electrical Engineering, who was listed among “The Light of Taiwan” in Global Views Monthly. There are 15 teammates, including Ho Cheng-yao, second year Ph. D graduate student and leader of RoboSot section, and Hu Yueh-yang, third year Ph. D graduate student and leader of HuroCup section. During the five days of fierce competition (September 15-19), they beat teams from England, China, Korea, and other countries.

In the RoboSot section, our robots had been modified with a simpler structure and lighter weight, hence a swifter mobility. Ho Cheng-yao indicates that to reduce the weight, they have dug holes in the side of body in the shape of “TKU”, which also works for publicity. The game consists of 3 on 3 competition in a shorten football field. “Our robot keeper has never lost any ball,” Ho said proudly.

In the HuroCup section, TKU has kept the No. 1 position in total grade since last year. The players are the 7th generation robots, with dual cores in control system, which stabilize the movement. Besides, the new IPC, which is afforded with enhanced visual management functions and higher sensibility of recognition, is the key of success. Hu Yueh-yang the teammates had burn the midnight oil in writing program and testing, and all the labors are worthwhile. Different from the previous years, this year the Marathon game took place outdoors. The natural light, with ever changing shades, increases the difficulty for the robot’s visual

recognition, which made the game become a tug of war. At the end, only three teams completed the game. “We are satisfied with our grade, though we know there are still space of improvement. We expect to create a better grade next year, and upgrade the TKU Robots,” Hu added happily.

Global Views Monthly has praised Dr. Wong Ching-chang that “with his efforts, Taiwan-made robots have won gold medals consecutively, and Dr. Wong can be called an alternative light of Taiwan’ .” Dr. Wong responds modestly that “while we make progress, other people make progresses too.” The game is often decided in a break of second; hence, the ability of instant response is the key, which requires endless researches and experiments and unbroken inheritance of experience. He expects the students to learn from doing, and have a better performance in the future to win honor for our school, and our country. ( ~Chen Chi-szu )

2010/10/21

