

**COURSE : Computer vision and robot**

**Summer Program 2017**

**COURSE TUTOR**

Professor Kikuhito Kawasue, Faculty of Engineering, University of Miyazaki

**COURSE OVERVIEW**

This course presents the hands-on experience with computer vision system and robotics. Computer vision technique to detect the information from a scene for the robot control is introduced. Student will use C++, C# or Microsoft Excel depends on his computer ability and develops the algorithm such as a feature extraction, calibration, robot control etc. We provide some applications to be selected in this course: 2D or 3D computer vision, 6-axis robot, 2-wheels robot, biped walking robot etc. Student will select some options with considering his pre-knowledge after his arrival.

**TEXTBOOKS AND READINGS**

Required readings will be distributed. A list of further materials for each topic may be provided in order to assist students in the preparation of their class.

**COMMUNICATIONS**

The course tutor's details are as follows:

**Office:** Faculty of Engineering, Room C212

**Tel:** 0985- 58 - 7583

**E-mail:** [kawasue@cc.miyazaki-u.ac.jp](mailto:kawasue@cc.miyazaki-u.ac.jp)

**URL:** [www.miyazaki-u.ac.jp/~kawasue](http://www.miyazaki-u.ac.jp/~kawasue)