COURSE DETAIL

INTELLIGENT INTERACTIVE ROBOT PRACTICE
Country Hong Kong
Host Institution Chinese University of Hong Kong
Program(s) Chinese University of Hong Kong
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Electrical Engineering
UCEAP Course Number 147
UCEAP Course Suffix
UCEAP Official Title INTELLIGENT INTERACTIVE ROBOT PRACTICE
UCEAP Transcript Title INTERACTIVE ROBOT
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description
This is a project-based course that offers a hands-on learning experience of the subject topics of robotics, perception and AI with applications in human-robot interaction. Students are required to first put together a workable mobile robotic manipulation platform using the provided mobile base and robotic arm, customized with perception sensing devices. Subsequently students use the mobile robotic manipulation system and the sensing devices to achieve perception and AI empowered real-world human-robot interaction with prescribed task objectives and scopes. Students work in small groups to study the hardware and learn the required ROS (Robot Operating System) software platform, understand the task requirements, work out feasible solutions, and accomplish the course project objectives. During the process, students acquire basic knowledge and practical skills of robotics, perception and AI.

Language(s) of Instruction
English

Host Institution Course Number
ELEG4701

Host Institution Course Title
INTELLIGENT INTERACTIVE ROBOT PRACTICE

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electronic Engineering

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