



**THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY**

**Department of Mathematics  
and  
Department Computer Science & Engineering**

***JOINT SEMINAR NOTICE***

**Artificial Intelligence:  
Paradigm Shifts in an Era of Big Integration**

by

**Prof. Song-Chun ZHU  
University of California, Los Angeles**

**Abstract**

The recent advances in computer vision, learning, and language have inspired renewed interest in academics and the public for developing general AI agents that are capable of communicating and collaborating with humans. This talk will provide a brief overview of the current state of AI research and a personal observation that AI is entering an era of big integration embracing vision, language, cognition, learning, robotics, and multi-agent systems. The endeavor calls for a unified framework for a wide range of tasks. Then the talk will present some paradigm shifts in order to reach this ambitious goal, for example, going from the current deep learning paradigm of “big-data for small-task” to a new paradigm of “small-data for big-task”. The talk will also discuss the cognitive architecture for human-machine communication and teaming, visual commonsense reasoning, explainable AI to gain human trust, and the path towards building a general AI platform and system.

**Date : 16 October, 2019 (Wednesday)  
Time : 3:00pm – 4:00pm  
Venue : Lecture Theater F, Academic Building  
(Lifts 25-26), HKUST**

**(Host faculty: Prof. Jianfeng CAI)**

*All Are Welcome!*