

題目：雲端的第二人生：環境與應用開發

報告者：梅興 (mei@csie.fju.edu.tw, 886-2-29023704)

研習班舉行方式：報告/授課

內容摘要：

Virtual World is not a new idea. Recently, emerging development of networking and grid/cloud computing technology enabled the deployment of many 3D virtual world systems. Among them, Second Life not only provides social and business services; but also leaves large rooms for designers and developers. Second Life has become a new platform for realize creative ideas.

This tutorial will firstly introduce the concepts and technologies behind cloud computing and virtual world. Second Life history and current status will be presented. Next, we will discuss the Second Life system operations and Grid structure. A Second Life compatible private virtual world, OpenSimulator, will also be introduced. The third part, the main theme of this tutorial - application development, is followed. Second Life application development involves several tasks, including: 3D content creating; Linden Script Language (LSL) programming; communication between in-world and web; ... etc. The syntax of LSL and interaction among in-world objects will be illustrated by examples.

Outline

An overview of Virtual World and Cloud Computing

- Basic concepts of Virtual World and Cloud
- From Grid to Cloud
- Second Life History
- Second Life Introduction

Second Life Environment:

- Second Life System Operation
- Second Life Grid Architecture
- Private world with OpenSimulator

Second Life Development:

- 3D content creating
- LSL (Linden Script Language) syntax, data structure
- Communication between in-world and out-world

Previous works in Second Life:

<http://slurl.com/secondlife/Jelloab/204/31/32>

<http://slurl.com/secondlife/Sweet%20Reach/171/35/106>

Online Game and Animation Techniques (Taped class presentation)

<http://www.youtube.com/watch?v=ziCqVHToCMk&feature=Playlist&p=72D5503F3F997FDA&index=0&playnext=1>

參加者：學校老師，碩士或博士生，或教育研究人員

可容納的參加者人數：視場地決定（最多50人）

參加者條件：對程式及網路有基本認識，對雲端虛擬世界應用開發有興趣

語言：華語

報告者背景：

梅興博士現於台灣天主教輔仁大學資訊工程系擔任副教授。從1999年到2005年，他同時在澳門高等校際學院擔任客座教授。他在美國德州大學阿靈頓分校取得計算機工程博士。他的研究興趣包括了Web技術，虛擬世界，和腦資訊學。梅博士迄今發表超過60篇學術論文，也共同撰寫了Engineering Wireless-Based Software Systems and Applications (Artech House, 2006)一書。從2006年起，他開始在3D虛擬世界Second Life中建構Weco Land教學環境及實驗，在Second Life中他的名字是Dr Mensing。他在輔仁大學所開授的線上遊戲與動畫課程也是以Second Life作為主要開發平台。

Title of Proposed Tutorial:**Second Life in the Cloud: Environment and Development****Proposed by:** Hsing Mei**Duration:** Full Day**Abstract:**

Virtual World is not a new idea. Recently, emerging development of networking and grid/cloud computing technology enabled the deployment of many 3D virtual world systems. Among them, Second Life not only provides social and business services; but also leaves large rooms for designers and developers. Second Life has become a new platform for realize creative ideas.

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Target Audience:

Everyone interested in learning the basics of the Second Life development.

Audience Prerequisites:

Knowledge of networking, programming experience is preferred.

No prior knowledge of virtual world is necessary.

Presenter

Hsing Mei is an associate professor in the department of computer science and information engineering at Fu Jen Catholic University, where he has been working on Web technologies, Virtual World, and Brain Informatics. He is also a visiting professor at Inter-University Institute of Macau from 1999 to 2005. He received his M.S. and Ph.D. in computer science and engineering from the University of Texas at Arlington. His research interest includes web computing, mobile wireless software, virtual world, and brain informatics. He co-authored the book *Engineering Wireless-Based Software Systems and Applications* (Artech House, 2006), and published more than 60 technical papers. He started building teaching environment in Second Life since 2006 (aka Dr Mensing @ Weco Land). The *online game and animation techniques* course he taught has been focused on Second Life development since 2007.

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