

2019中文学校春季学期才艺教师及课程系列介绍III

-- 视频游戏开发编程入门

好消息！现代中文学校将于2019春季学期陆续推出儿童视觉艺术课程系列和视频游戏开发编程入门等新课程。另外，现有的舞蹈, JAVA, 数学竞赛等课程也有相应调整。请在注册时关注课程介绍。春季学期将于1 / 6 / 2019 开始, 注册窗口将于今日开放，敬请关注学校的邮件通知。

Introduction to Programming through Video Game Dev

视频游戏开发编程入门

- ID 课程代码: PR06A_19S
- Date 日期 : Sun
- Start Date: 1/6/2019
- Session 时间 : Session 7, 3:20 pm - 4:05 pm
- Room 教室 : TBD

授课老师 : 赵洛雷 Luolei Zhao “Larry” Zhao. Larry recently graduated with a Masters in Computer Science from Northwestern University, and he is now working as a Software Developer at Boeing. He has been a lifelong programmer, starting when he was in middle school, and he is always keeping up with the newest software development techniques and technologies. In addition to his work, he has completed multiple independent video game projects in his free time. Most recently, he has been helping create an interactive exhibit for the St Louis Science Center. He has always been passionate not only on working at his own projects but also helping others on their own projects. At Northwestern, he founded a club called Pioneers of Independent Entertainment, a branch of the International Game Developers Association. The club focuses on teaching programming and other skills to passionate students at Northwestern, and helping them find groups to work on larger projects with. In addition, he helped expand a mentorship program with Northwestern’s IEEE student chapter, the group aims to mentor students who want to learn broader

software development and technical skills. He hopes to bring his experience to the Chinese community of St Louis.

Feel free to contact him at: luoleizhao2018@u.northwestern.edu

Other sites:

Pioneers of Interactive Entertainment: <https://pienorthwestern.com/>

IEEE at Northwestern: <http://ieee.northwestern.edu/>

Web Page: <http://www.luoleizhao.com/>

Play his most recent Project!: <https://github.com/DrDoak/GDS2/blob/master/README.md>

课程介绍: Introduction to Programming through Video Game Development. Intended Audience: Recommended for Students grades 9 and higher. Knowledge of basic Algebra is a prerequisite. Prior programming knowledge is not required. However, it can still be beneficial. Required Materials: This course will require users to download Unity3D Personal Edition. This is free software and will not require any additional expenses. Software can be downloaded from here: <https://store.unity.com/>. The software will need to be downloaded and installed before the first day of class. A laptop capable of running Unity3D is required. Recommended operating system is Windows 10. Other acceptable operating systems are: macOS 10.11+, Windows 7 and Windows 8 Android Tablets and iPads will not be able to run the necessary software and will not be sufficient for this course. Summary: Programming is quickly becoming an ubiquitous basic skill not only for software developers, but throughout the engineering and scientific world. Thus, students who understand the basics of programming will have access to a powerful toolset applicable in almost any field. However, programming can be difficult to approach and is often taught in very abstract and dry courses. This course is designed to present the fundamental topics of programming by relating them to something very familiar: Video games. As we go through the course, we will slowly make changes and add onto video game projects. Each lesson introduces basic programming concepts by having students make little changes to a pre-built game. Students should leave the course understanding the basics of how a programming language works, how they are set up, and how to create scripts and classes.

Tentative Topic List: Broad overview of Unity engine. Basic Programming Terminology
Introduction to the Unity Layout. Basic Terminology What is a Script? Introduction to
Scripts Variables Data Types (floats, strings, bools, etc.) Strings Lists and Arrays
Functions/Methods Classes Relating to other programming languages.