

LEONG SEE SHUEN

Game Engineer (Technical)

leongss@cmu.edu

leongseeshuen@hotmail.com

Website : <http://seeshuenleong.tk>

Skills

Programming

C, C++, C#, Scheme,
Java, Python, Lua,
ActionScript 2 & 3,
HLSL, GLSL, CUDA

Framework

OpenGL, DirectX,
.NET, wxWidgets UI

Software

Visual Studio, Eclipse,
Unreal Engine, Unity3D,
CryEngine, Flixel,
Git, Mercurial, RhodeCode,
Redmine, Fogbugz,
Adobe Photoshop, Flash,
Dreamweaver,
Microsoft Word, Excel,
PowerPoint

Language

English, Chinese, German

Interests

President, Game
Development Group, NUS

Hobbies

Video Games
Computer Hardware
Exercising in Gym
Audio Fidelity experiences

Projects / Work Experience

[Space Watchers \(Lead Engineer\)](#)

Sep – Dec 2015

- Worked with Electronic Arts to create a new type of hidden object game using video, in Unity3D ([C#](#)). Responsible for integration, game architecture, custom UI elements and the authoring tool (creating video levels easily).

[Lending Hearts \(Lead Engineer\)](#)

Jan – May 2015

- Developed an app on iOS and Android, in Unity3D ([C#](#)), for the Lending Hearts organization that allows children to customize planets and play minigames to co-achieve new items for everyone. Responsible for integration, game architecture, server backend framework and customization, inventory and reward systems.

Global Game Jam

2009 – 2015

- Participated and led teams annually on-site to create themed games in 48 hours. Always looking for challenges, pushed teams to use tools new to them such as CryEngine ([Lua](#)) and Unity3D ([C#](#)).

Building Virtual Worlds, CMU-ETC

2014

- Integrated code ([C#](#)) and assets for the various worlds
- Developed designer-friendly components for use in Unity3D
- Responsible for creating the user interfaces (both design and scripting)
- Developed hardware abstraction and simulation layers for gameplay logic (for use with specialized input hardware like Google Tango, Microsoft Kinect and Oculus Rift)

Dissertation, NUS

2012 – 2013

- Created a DirectX 11 game engine ([C++](#)) with the ease of use of the Unity3D game engine and the extensibility of modular shaders ([HLSL backend](#))

Game Development Project, NUS

2012 – 2013

- Worked in a team to develop a procedural racing game in Unity3D ([C#](#)) where the tracks are generated on the fly based on the player's skill
- Developed physics for the game's hovering vehicles and non-track environment generation

Game Development Group projects, NUS

2009 – 2013

- As president of the group, led members in development of their first 3D game, a top-down shooter, using Unity3D ([C#](#)). Responsible for developing weapon systems, enemy behaviors and tools for level designers and UI.
- Developed the battle system and time synchronization framework for a rhythm-based fighting game, [Pina Colada](#), in Flash ([ActionScript](#))

[Singapore-MIT GAMBIT Game Lab](#)

Jun 2012 – Aug 2012

- Interned as a programmer to create the experimental game, Phantomation, which is a Gold Medal Winner at the 2013 International Serious Play Awards
- Worked on tutorial, level, AI and UI development and integration of client framework ([ActionScript](#))

[Promotional Game, Prince of Persia : The Forgotten Sands](#)

Feb – May 2010

- Designed and developed boss designs for a Flash promotional game for the "Prince of Persia : Forgotten Sands" game by Ubisoft, which is a finalist in the 2011 MI6 Game Marketing Awards

Education

Carnegie Mellon University, Entertainment Technology Center (CMU-ETC)

2014 – 2015

- Masters in Entertainment Technology

National University of Singapore (NUS)

2009 – 2013

- Bachelor of Computing in Communications and Media, Games Specialization