

WORK Technical Lead and Game Programmer – FreshPlanet (September 2010 –)

Work with game design, art and management departments, providing valuable insight into making decisions affecting the development of our social games.

As a game programmer, I am involved in both our front-end and backend of our games, in ActionScript 3, Objective-C, Java (Android) and Python.

Software Engineer – Carnegie Mellon University (May 2010 – July 2010)

Programmed and expanded a tool for museum staff to create augmented reality exhibits without writing code. Programmed in C++ using OpenGL, OpenFrameworks, Qt and ARToolkit.

Programming Intern – Carnegie Mellon University (Summer 2009 and 2008)

Worked on various projects during two summers. Among my duties were re-writing games for the latest Panda3D game engine (Python) and an ActionScript 3 game for a museum exhibit in Pittsburgh, PA.

Supervisor and Developer -- G2 Colombia (September 2007 – December 2007)

Supervised and developed advertisement games, websites and other online media.

Lead Developer - Quyne S.A. (May 2006 – September 2007)

Lead Developer for various web projects using Java technologies.

PROJECTS Lead Designer and Engineer – Project ORCAS

Worked with the California Academy of Sciences to conceive a 5 year long plan to develop various interactive and didactic exhibits using the concept of gamification to increase visitor retention and engagement.

Software Engineer and Designer – Sketch-It-Up! (Spring 2009)

Student-pitched project that aimed to allow game developers to "sketch" game ideas easily and quickly. My duties were user interface design and development. Developed in Python using the Panda3D game engine.

Programmer -- Patient Experience (Fall 2008)

Developed games to be used in the days following a hip or knee surgery. Used C# and ActionScript 3.

COURSEWORK Game Design (Spring 2009)

Designed and created games in multiple formats following methods taught by CMU faculty Jesse Schell.

Building Virtual Worlds (Spring 2008)

Participated as a programmer in the design and creation of live virtual worlds (game prototypes), each one developed within two weeks working with multidisciplinary teams. Python, using the Panda3D game engine.

Graduation Project (Spring 2006)

Developed proof of concept of a Java game using the Mobile 3D Graphics API for J2ME (JSR-184)

SKILLS Software Engineering (general, web, game) and Game Design.

Programming C/C++, Objective-C, Java, Python, ActionScript 3, JavaScript, (X)HTML, CSS, SQL, XML, JSON.

Tools and SDK Visual Studio, Xcode, Eclipse, Google App Engine, Unity, Flash, FlashDevelop, MySQL, PostgreSQL, Git, Perforce, Subversion, CVS, Panda3D, UDK, Flixel, Struts 2.0, Stripes, Ant, Maven, Hibernate, CakePHP, OpenGL, Mobile 3D for Java API (M3G), Push Button Engine, Flash Builder.

EDUCATION Carnegie Mellon University (Graduated December 2009)

Masters in Entertainment Technology *M.E.T.*

Universidad de los Andes (Graduated July 2006)

Computer and Software Engineering *B.Sc.*

PUBLICATIONS Bulut Karakaya, Camilo Garcia, Daniel Rodriguez, Manoj Nityanandam, Nadia Labeikovsky and Theyab Al Tamimi. "Sketch-It-Up! Demo." *Lecture Notes in Computer Science: Entertainment Computing - ICEC 2009* (2009): 313-14. Print.