LI-HENG LIANG

Entertainment Technology Center
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EDUCATION

Carnegie Mellon University | Pittsburgh, PA   expected: May 2011
Master of Entertainment Technology
Selected Courses: Computer Graphics, Technical Animation, Software Structure of User Interface

National Taiwan University | Taipei, Taiwan   Jun. 2008
Bachelor of Science in Electrical Engineering
Selected Courses: Data Structure and Programming, Algorithm, Digital Visual Effects

WORK EXPERIENCE

NEC Corporation | Software Developer Intern   Jun. – Aug. 2010
C & C Innovation Research Laboratory, Nara, Japan
Implemented an interactive real-time environment data visualization tool using Panda3D in Python.
Designed and implemented how users interact with objects in virtual 3D space with keyboard and mouse.

Microsoft Corporation | Software Developer Intern   Jul. – Sep. 2007
China Technology Center (CTC), Beijing, China
Implemented part of the user interface for a Windows Form application using C#.
Worked from design to testing phases in a real-world collaborative software development process.

Carnegie Mellon University | Teaching Assistant   Aug. – Dec. 2010
Building Virtual World Course at Entertainment Technology Center, Pittsburgh, PA
Provided 3D modeling instructions to students using Autodesk 3ds Max.
Troubleshot technical issues of various platforms such as Head-mounted Display and Playmotion.

National Taiwan University | Graphic Designer   Apr. – Jul. 2008
Office of Creativity & Entrepreneurship Program, Taipei, Taiwan
Created hand-drawn and digital art images for printed and web-based medium.
Designed layout for program wesite and on-line documents to enhance reader experience.

COURSE PROJECTS

Computer Graphics & Technical Animation | Graphics Programming in C++   Jan. 2011 – Current
Two courses provided by Carnegie Mellon University's Graphics Laboratory
Implemented a mesh subdivision algorithm, an outline shader and a basic ray tracer.
Implemented an inverse-kinematic control for humanoid skeleton and a simple cloth simulator.

Oracle SunSPOT as an Input Device | Team Project, Programming in Java   Jan. 2011 – Current
Client project sponsored by Oracle Corporation using the company's SunSPOT technology.
Programmed an interface in Java to trigger keyboard events with hand-held accelerometers.
Participated in building a multi-player game using multiple accelerometers as input device.

Asymmetrical Cooperative Gaming | Team Project, Programming in C#   Aug. – Dec. 2010
Experimental genre-blending PC game combining first-person shooting, racing, and puzzles.
Pitched by student team and sponsored by Entertainment Technology Center at Carnegie Mellon University.
Implemented the 2D aspect of the game using Unity3D game engine and C#.
A full-length article for the game was featured on Gamasutra.com on January 4th, 2011.

EXTRACURRICULAR ACTIVITIES

Qt Game Development for Mobile Phone | Nokia Ovi Store Franchise   Dec. 2010
Independent mobile poker game development done with roommate during spare time
The game was featured on the front page of Nokia Ovi Store and has received over 250 paid downloads.
Created all art assets for the game including character portraits, interface elements and icons.

SIGGRAPH Asia 2010 Student Volunteer Program | Seoul, Korea   Dec. 2010
Provided guidance and assistance to international conference attendees.

SKILL SET

Programming | C++, C#, Java, Python, HTML/CSS, OpenGL, GLSL, Google Web Toolkit
Software | Adobe Photoshop, Unity3D Game Engine, basic knowledge in Autodesk Maya and 3ds Max
Platform | Software development experience under Microsoft Windows, Linux and Mac OS X
Art | Skilled in traditional and digital drawing, hands-on experience in graphics design
Languages | Fluent in English and Chinese, basic understanding in Japanese