

Chen Fang

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Objective

Great team player looking for a challenging **software development** position

Education

Master of Science, Computer Sciences
Louisiana State University, Baton Rouge, LA

Jan.2012 ~ Dec. 2014

GPA: 3.84

Master of Science, Electrical Engineering
Louisiana State University, Baton Rouge, LA

Sep.2010 ~ May. 2013

GPA: 3.87

Skill Set

- Languages
JavaScript / Node.js / Socket.io / AngularJs / Express.js / MEAN
Java / J2SE / Android, C# / .Net, C / C++, Python, PHP / LAMP
- Databases
MySQL / MongoDB;
- Web Technologies
HTML / HTML5 / CSS / SASS / LESS / XML / JSON
- Graphics
OpenGL / GLSL, Cocos2dx, Unity3D
- Frameworks
AngularJs / Spring / Yii
- Tools
Git, Eclipse, Visual Studio, PHPStorm, Unity3D, Cocos2dx, Mobile (Android)

Working Experiences

- **Intern at Gaia Interactive Inc. (*frontend and backend*)** May 2014 ~ Aug. 2014
It is a Facebook-like social network. Work with the team on both **frontend** and **backend**. Developed email campaign system using Amazon Email Sending Service (SES), and customer administration tools. It includes **PHP** in **MVC** architecture, **Database** design, **UI** development, **Javascript DOM** interaction. Experienced **Agile** development workflow, **Git** distributed version control.

Tools & Languages: Eclipse, AWS, Mysql, Yii, JQuery, Bootstrap, HTML5, CSS, Javascript, PHP

- **Junior Developer at Louisiana Transportation Research Center** July 2012 ~ Jan. 2013
[Arcgis Web Application](#), is a government assigned project, co-work with a civil engineer, and supervised by a software project director. It is a **Web Map + Database + UI** application based on Esri Arcgis ADF toolkit + SQL2008 + ASP .Net Framework. Experienced development cycle. *Language: Javascript / C# / SQL*

Practical Coding / Project Experiences

- **Unity3D Game Project “[Dungeon Adventure](#)”**

Jan. 2014 ~ May 2014

Demo Link: <http://chen-fang.com/#/portfolio>

Tile-Map based dungeon adventure game. Implemented: **A* Path Finding**, **Breadth-First Search** for Character **Auto Dungeon Exploration**, **Fog-of-War**, Auto Attacking Detection, Alpha Blend Shader, **XML Dynamic Map** Loader, Character Status GUI. It's a proud work.

*Language: **Javascript / C#***

- **Human Computer [Interface Design](#)** (attended TechPawLooza Expo in LSU)

Jan. 2012 ~ May. 2012

A multi-screen application (game-like) having multi-user inputs with smart phones by TouchOSC protocol, display with 2*3 tiled led screens, and Microsoft Surface Platform.

*Language: **Java***

- **Unity3D Game Project “[Golf-Truck](#)” (3D)**

Jan. 2012 ~ Apr. 2012

Design& create a golf strike+ car driving game by Unity3D, teamwork with artist.

*Language: **JavaScript***

- **A toy? A device? Arduino Events Reminder**

Jan. 2012 ~ May. 2012

A human computer interface project. It's designed as a commercial electronic toy that uses colored LED lights and display to remind people how much time left to the deadline of their upcoming schedule. Schedule are upload through wifi from user's computer.

*Language: **C / C++***

- **OpenGL Project “[Tron-Ball](#)” (3D)**

Jan. 2013 ~ May 2013

Simulating a 3D “Tron-Legacy” like ball rolling in a generated maze. Accomplished ball moving function, collision detection, particles system, texture mapping and glow & bloom shader.

*Language: **C++ / OpenGL***

- **Pixel Illumination and [Projective Texture](#)**

Oct. 2012 ~ Dec. 2012

Mimic a real illumination effects on 3D models with various texture maps, and simulate a spotlight which projects texture on the model's surfaces, by using OpenGL.

*Language: **C++ / OpenGL / GLSL***

- **Architectural CPU Pipeline Simulator**

Sep. 2011 ~ Dec. 2011

Simulating a CPU pipeline, it reads 32bits machine codes, translates it into processor instructions, then shows the pipeline procedure, and dynamically shows the status of registers and memory

*Language: **Java***

- **Infrared Remote Controller** (programmable)

Sep. 2008 ~ May 2009

Designed from scratch, selected hardware components, built up the circuits, programed on 8051Chip, produced a programmable infrared remote controller

*Language: **C***

- **Smart Water Heater Device** (temperature controllable)

Sep. 2007 ~ May 2008

Designed from scratch, selected hardware component (temperature sensor, 8051 SOC, electrical heater/cooler, ADC/DAC, power source, voltage transformer), handcraft Analog/Digital Converter. Using control theory to optimize the speed of temperature control.

*Language: **C / Assembly***

Appendix: Brief Project Description

Unity3D Game Project “Dungeon Adventure”



Tile-Map based dungeon adventure game, powered by Unity3D.

<http://chen-fang.com/#/portfolio>

Implemented various algorithms that includes: **A* Path Finding**, **Breadth-First Search** for Character **Auto Dungeon Exploration**, **Fog-of-War**, Auto Attacking Detection, Alpha Blend **Shader**, **XML Dynamic Map** Loader, Character Status GUI.

Language: Javascript / C#

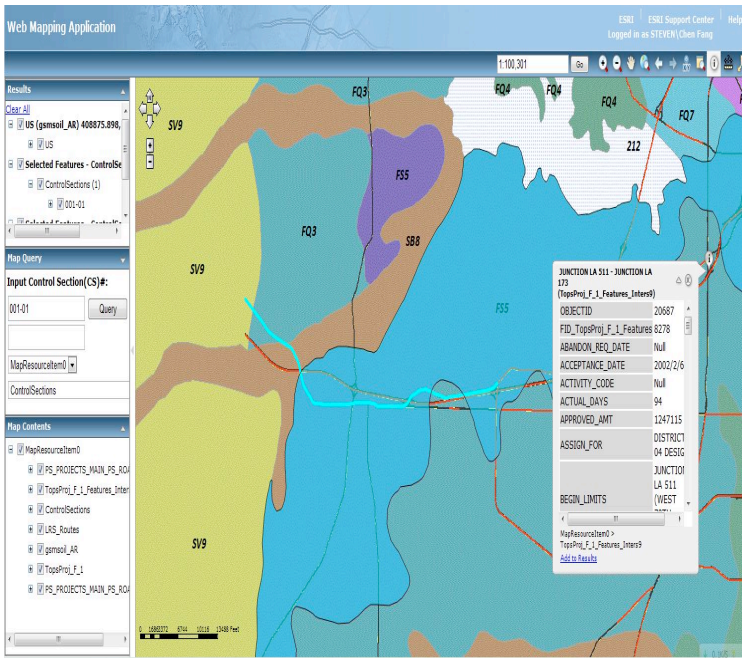
Human Computer Interface Design (attended the TechPawLooza Expo in LSU)



2*3 tiled display application pretends to be located in an airport rest zone, which can be interacted with multi-users' own **mobile devices** with TouchOSC protocol. 4 main applications to make people enjoy their waiting of their flight: top, a jigsaw game; mid, a arts gallery slides show; bottom-right, an airport service quick search engine; bottom-left, new user sign in with a specific icon. (3 people group)

Language: JAVA / C# / XML

Arcgis Web Map Application (utilized by Louisiana Transportation Research Center)



An Arcgis map based web site application designed and implemented for the LTRC (Louisiana Transportation Research Center). It involved with .Net, XML, Arcgis Server and Map toolkit, SQL2008 Database and little JavaScript. It gives the user an interface to search the soil data under a specific section of road and present the results in a chart or output into an excel file. The selected road or area will be highlighted and the interface is easily to be used with no trained people.

Language: *JavaScript / C# / SQL*

Pixel Illumination and Projective Texture in 3D with OpenGL



1. Simulate a high detailed illumination effects by using normal-map, diffuse-map, and specular-map textures on the same object and contribute each illumination effect with certain portion.

2. Apply a “projector” effect with a **projective textures** onto surfaces. (“EA” Logo in this case)

Language: *C++/ OpenGL*