QIMIN LIU

Full Time, Internship, Programmer,
UI Designer, 3D Animator

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+ Skills

Programming Languages

Advanced: C++, C, Java, Action Script, SQL, HTML, Javascript, CSS
Intermediate: C#, Objective – C
Learning: Python, Visual Basics

Applications

Operating Systems: Windows, Mac OS, Linux
Adobe: Dreamweaver, Illustrator, Photoshop, After Effect, InDesign
Other: Unity, Android Studio, Maya 3D, Processing, Arduino, My SQL, XCode, Matlab

Transferable

Quick learner with curiosity to explore new technology
Ability to work under pressure with excellent time management
Work well in a team structure and adapt new group environment quickly
Multicultural with Chinese as mother language

+ Experience

Software Engineer, Yetec Intelligent Ltd. //Jan 2016 – Mar 2016

Developed a 3D real-time animation to simulate the movement of cranes by using Maya, Unity3D and Javascript which provides users a visualization of crane movements
Designed and Built the login web page UI by using Adobe Illustrator, HTML, Javascript and CSS with Bootstrap which improves the user experience and visual effect when logging.
Updated and Optimized the real-time data graph by using .net and Highcharts which allows users to view the real-time data changes of a crane
Designed the company brochure by using Adobe Indesign which results in a 20% increase of total sells

UI Designer, Ateko Electronics Co., Ltd. // Jun 2015 – Jul 2015

Designed the layout of a smart TV operating system by using illustrator which enhance the user experience of using the operating system
Designed all icons of the operating system by using illustrator which improves the visual effects and identification

+ Projects

Text Adventure, Software Development, SFU // Sept 2015- Dec 2015

Developed a multi-user dimension game in an eight members team by using C++ which gamers can create games with their friends, and explore their friend's world.
Built an independent branch in gitlab with teammates to develop the game together which ensures our work wouldn't be overlapped and can be reviewed efficiently
Created a text-based console user interface by using curses library which allows the terminal has an input and an output window for the user
Applied CMake to generate Makefiles automatically which provides a consistent Makefiles for the team
Constructed a commander handler by implementing factory pattern to add corresponding events into a queue which allows users to get text outputs without concurrent error
// https://csil-git1.cs.surrey.sfu.ca/373-15-3-kulfi/textadventure.git

Fixing N Queens, Intelligent Systems, SFU // Sept 2015- Dec 2015

Established two algorithms by using Minizinc and C++ which solved the Fixing N Queens problem and optimized the complexity of the solutions
Constructed a CNF formular by analyzing and seperating the problem into smaller problems which makes the problem be solved by SAT solver
Designed a backtracking algorithm by converting the problem to Independent Set problem which optimized the complexity of the solution
Analyzed the complexity of two algorithms by testing the programs multiple times which provides a more accurate result

+ Projects Continued

Lifary, Mobile Computing, SFU // Jun 2015- Aug 2015

- Built a diary android application by using Java which helps people to record their daily life in multiple methods privately.
- Constructed the structure of the application by using Android Developer which gives clear instructions about building the application
- Tested the application by unit testing, white box testing, and black box testing in each iteration which ensures the stability of the application

//https://play.google.com/store/apps/details?id=qiminl.lifaryupdate

The Jumping Fox, Animation, SFU // Jun 2015 – Aug 2015

- Created an educational 3D animation by using Maya3D which demonstrates a journey of a jumping little fox
- Designed and Modeled all character models by using Maya3D which provides consistent models for the animation
- Assigned tasks to group-mates by checking schedule and communicating with group-mates which improves the efficiency of the completion of the animation
- Animated parts of the animation by using Maya3D and After Effects which helps the completion of the animation

// https://vimeo.com/136525741

Complex Shape Detection, Model-Based Computer Vision, SFU // Mar 2015 – May 2015

- Established a shape detect program by using Matlab which compares the difference between Generalized Hough Transform and Color Generalized Hough Transform
- Built two different programs by implementing different shape detect algorithms which outputs different shape detect results and different statistics
- Tested the programs by using amount of different images in multiple times which ensures the stability and reliability of the results

Falling Tetris, Intro to Computer Graphics, SFU // Oct 2014 – Nov 2014

- Created a game by using OpenGL which allows users to control the Tetris color, falling speed and shapes
- Adjusted the game from 2D to 3D in second iteration by setting up the camera 'look at' point of the game which provides a perspective view of the game
- Tested the game by compiling and run the game in each iteration which ensures there is no compiling error or runtime error in every part of the game

Who Took My Head, Game Design, SFU // July 2014 – Aug 2014

- Developed a 2D indie game by using Unity4.3 which enables casual gamer to move around and explore the story of the game
- Programmed the game by using C# in all levels to control all objects in game, which includes player movement, enemies movement, and level loading
- Tested the game by checking every compiling error, playing the game in all level to ensure there is no runtime error or logical error

Greedy Algorithm Differences, Data Structure I, SFU //Feb 2014 – Mar 2014

- Established a Greedy Algorithm program by using C++ which checks the differences of node exploration between Dijkstra algorithm, Prim algorithm and Kruskal algorithm
- Constructed a directed graph by setting up structure of nodes and edges which is capable for implementation of different greedy algorithms
- Tested the program by compiling and run each algorithm which ensure there is no compiling or runtime error for each algorithm

Student Gradebook, Database System I, SFU // Nov 2013 – Dec 2013

- Developed a Windows application by using C# which allowed enrolling/ removing students from call, adding/ editing students grades and viewing students grades and class reports
- Utilized a remote database using SQL Server in order to save the application's information
- Constructed SQL queries using prepared statements and stored procedures to prevent SQL injections
- Built basic GUI by using Visual Basics to enables user for better usability of Gradebook

+ Education

Simon Fraser University // Sept 2011- Dec 2015

Bachelor of Science
Major: Computing Science
Minor: Interactive Arts and Technology

+ Interests

- Gaming
- Drawing
- Swimming
- Badminton