Linghao Gu

1335W 36th St. •Los Angeles, CA 90007 •linghao@usc.edu •(213)400-8429

EDUCATION

University of Southern California Los Angeles

College of Viterbi Engineering Expected May 2014

Master of Computer Science

Major GPA 3.73/4.0

SiChuan University Chengdu China

Bachelor of Software Engineering July 2012

Major GPA 3.7/4.0

TECHNICAL SKILLS

Application: MySQL, SQL Server

Language: C, C++

SELETED COURSES AND GRADES IN GRADUATE SCHOOL

Operating System(A), Parallel Programming(A-), Database System(A-), Algorithm(A), Artificial Intelligence(A)

WORK EXPERIENCE

Software Engineering Internship in Kingdee January 2012-Februray 2012, Beijing

Position: Tester

ACADEMIC PROJECT EXPERIENCE

A Small Operating System: Team member, three members

Language: C October 2012-January 2013

Description: Implementing part of an operating system called weenix, including the file system, process and thread. I wrote code for thread, mutex lock and part of process. Using 1:1 model to implement thread.I wrote parts of the file system.

Individual Projects:

Algorithm projects:

Language:C, C++

Description: In these projects, most of the common used algorithms have been implemented, including BFS, DFS, back-tracing, greedy, divide and conquer, dynamic programming. Many data structures are also used in these projects, like linked list, binary tree, graph.

Maze Generation And Solution: Using Union structure and adjacency-list based graph to generate a Maze. Using Dijkstra algorithm, breadth-first search algorithm to find solutions for different situations.

Sudoku Generation And Solution: Using double linked list to store data, using backtracing algorithm to generate a sudoku and find its solutions.

AVL Tree Implementation: First implementing a binary search tree and then building an AVL tree

Traffic Shaper Simulator: Using POSIX for simulation.

Parallel Programming:

Language:C,C++

Tools: CUDA, MPI, OpenMP, POSIX

Description: Paralleling code: quick sort,merge sort, image processing, matrix multiplication.