Fanying Ye

Fanying.Ye@tufts.edu | (857)272-9666 | 15B Crescent St, Medford, MA 02155

OBJECTIVE

To obtain a software engineering position in greater Boston

EDUCATION

Tufts University, Medford, MA — Expected May 2016
Master of Science in Electrical and Computer Engineering, GPA 3.87/4.00

Beijing Institute of Technology, Beijing, China — September 2010 - July 2014
Bachelor of Science in Electronic Science and Technology, GPA 90.37/100

TECHNICAL SKILLS

Programming Languages: Java, C++, HTML, CSS, JavaScript, PHP, C, Verilog
Databases: PostgreSQL, MySQL, MongoDB
Applications: Eclipse, weka, Visual Studio, MATLAB
Environment: Linux, UNIX, Windows

RELEVANT COURSEWORK

Data Structures (with lab), Algorithms, Introduction to Machine Learning and Data Mining, Object-Oriented Programming for Graphical User Interfaces, Operating Systems, Database Systems, Computer Engineering (with lab), Probabilistic Systems Analysis

ACADEMIC PROJECTS

Boggle Game (https://www.eecs.tufts.edu/~fanying/bog15/) (C++)
- Implemented a solver by recursively finding all possible paths on board for all solutions of boggle, a checker and a grader for answers of users

Maze Solver (C++)
- Wrote programs to solve maze using both recursion and stacks

Three Sorts (C++)
- Programmed to implement three advanced sorting algorithms: Selection sort, Insertion sort and Quick sort, and evaluated corresponding performance

kNN and Relief (Java)
- Implemented kNN algorithm and two Relief improvement methods: weighted distance and feature selection
- Evaluated the accuracy of kNN with and without Relief as well as the effect of number of times of relief

Don't Tap The White Tile (JavaScript)
- Implemented this web game by DOM operation, timer setting and event delegation

Message board (PHP, MySQL)
- Programmed a web message board that can save user-submitted data to MySQL database and show saved data on website when required

Analysis of optical imaging device (C)
- Implemented Finite Difference Method to resolve electric field distribution in the rotationally symmetrical space
- Wrote programs to do numerical calculation and results displaying

Pipelined Adder and Pipelined Multiplier (Verilog HDL)
- Used D flip-flop(DFF) as a basic memory element to achieve pipelining 4-bit adder
- Implemented pipelined multiplier using full adders

WORK EXPERIENCE

Tufts University ECE Department, Medford, MA September 2014 - Present
Teaching Assistant

- Grade homework for Introduction to Computing in Engineering, Introduction to Electrical Systems and Probabilistic Systems Analysis.
- Mentor students for MATLAB Lab
- Provide individual assistance to students during open office hours

North China Research Institute of Electro-optics (NCRIEO), Beijing, CHINA January 2014
Intern - July 2014

- Worked in the System Design team
- Designed, fabricated and tested circuits of laser spot measuring and recording device
- Programmed in MATLAB to develop a GUI user interface to show statistics, 2D and 3D graph of measured laser spot.

AWARDS

Mathematical Contest In Modeling, April 2014

- The Meritorious Winner, for top 9%

National Undergraduate Mathematical Contest in Modeling of China, October 2013

- First Prize