Qi Tian

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OBJECTIVE: Admission into MS in Information Technology-Mobility program

SUMMARY: Proficient with C, C++, and JAVA; HTML, JavaScript, php, JSP, sql, oracle database; Android, egret, unity3d; machine learning
Java/J2EE, NET, Unix, Linux

PUBLICATIONS: Feng Liu, Zian Wang and **Qi Tian**. An Optimization Method of Reinforcement Learning. ICTAI (International Conference on Tools with Artificial Intelligence) 2017

Feng Liu, **Qi Tian**. SSCUSM: An Improved Algorithm for Reinforcement Learning. AAMAS (International Conference on Autonomous Agents and Multiagent Systems) 2018. Submitted

A paper introducing an automatic testing method, submitted to a famous anonymous conference

EDUCATION: **Bachelor of Science in Software Engineering, 09/2014-06/2018**
Nanjing University
GPA: 3.58/4.0
Courses taken included:

Discrete Mathematics	Network Programming
Operating Systems	Object-Oriented Development
Data Structures	Analysis and Design of Algorithms
C/C++ Programming	

Course on Coursera: Machine Learning

RESEARCH: **University of Purdue, West Lafayette, 07/2017-09/2017**
Research Intern in Professor Qiu Xiaokang's Program Synthesis group

- Solved the SyGus problem efficiently, and was mainly responsible for the implementation of the new method
- Conducted various kinds of experiments to ensure the new method achieves better efficiency and accuracy
- Carried out the new method by Java language and the SMT solver, which worked very well (The new method's efficiency is ten times higher than the old method's)

An Automatic Testing Method for GUI Software, 03/2017
Supervisor: Prof. Minxue Pan

- Used the automatic test tool QTP (Quick Test Professional), Robotium, machine learning algorithm as well as the image matching technology to realize the automatic test for GUI Software
- Proposed a method that can achieve GUI testing process automation with only a small amount of human intervention
- Implemented the method and finished a paper introducing this new method. The paper has been submitted to a famous anonymous conference.

Study on POMDP and Reinforcement Learning, 01/2017
Supervisor: Prof. Feng Liu

- Joined the POMDP group and studied the POMDP problem
- Learned how to use U-Tree method to establish the POMDP model and tried to put forward an improvement for this method

- Found the deficiency of this method and raised improvement for it
- Published a paper introducing this improvement

Complete National Training Program of Innovation for Undergraduates 12/2016
- Program Aim: develop a mobile application that can control NAO robot to complete complex instructions
- Created the instructions based on NAO platform and various API
- Used MVP pattern and Rxjava for the android application
- Developed this mobile application successfully and received the **certificate of project completion**

Develop Egret Mobile Game, 12/2016
- Program Aim: develop a mobile web game that can run online directly
- Used egret engine, MVC pattern and SQL server for the game's logic service and date base
- Participated in publishing this game successfully

Web Based Project Management System, 03/2016
- Assisted in developing a website that can analyze Github user data and recommend the suitable projects to users
- Established the main structure of the website and used machine learning to analyze user data and find user's interest characteristics
- Finished this website (it worked well.)

Develop Logistics Management System, 10/2015
- Program Aim: develop a system including the receipt of goods, logistics and transportation, warehouse storage, capital management and other functions
- Used javaFx, mysql and other technologies to implement this software's user interface and data base
- Developed this system successfully (this system worked very well.)

INTERNSHP: **SAP Labs China, 09/2017-present**
Software Engineer in JAM Department
- Use Ember.js and Ruby on Rails to finish a blog website alone
- Join the process of refactoring the whole system architecture
- Use Watir to do automation tests for our products, improving the products' quality

COMPETITION: Microsoft Imagine Cup Competition, 03/2017
- Developed an **AR** android app, which provides an alternative for the common running style
- Implemented **AR** technique and the system's data base
- Entered the national semi-finals

Citi Cup Competition, 11/2016
- Developed the Stock Order Intelligent Optimization Generation System, which combined the machine learning into the VWAP algorithm, and provided high-frequency demolition strategy for large orders
- Won **national fourth** place and **best financial creativity award**

NAO Create Marathon Programming Competition, 05/2015
- Programmed on the NAO robot to control it to complete different tasks
- Responsible for the process of NAO robot's API as well as external ones, such as Microsoft's image recognition API
- Won the **most creative award**

HONORS: Third prize of school scholarship for two consecutive years, 2014-2016