

## Qi Tian

22 Hankou Road, Gulou, Nanjing, Jiangsu, China • (+86) 15905176300 • 141250126@smail.nju.edu.cn

**OBJECTIVE:** Admission into M.S. in Intelligent Information Systems 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. Feng Liu**

- 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. Minxue Pan**

- 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