

# Liangwei Li

132-6262-3001 | liliangwei@sjtu.edu.cn

Home Page: liangweilee.com



## EDUCATION

---

### Shanghai Jiao Tong University

Sep 2016 - Jun 2020

Bachelor of Engineering in Information Engineering & Bachelor of Arts in French

Shanghai

- GPA: First Year: 4.04/4.30 (Top 5%)  
Second Year: 3.94/4.30 (Top 5%)

## PUBLICATIONS

---

### Combinational Q-Learning for Dou Di Zhu

Yang You, Liangwei Li, Baisong Guo, Weiming Wang, Cewu Lu [[arXiv](#)]

Under Review, 2019

### A Data Driven Energy Profile Evaluation and Prediction System

Liangwei Li, Haolin Pan, Yiming Qin [[pdf](#)]

The Mathematical Contest in Modeling (MCM), 2018, Meritorious Winner

## RESEARCH EXPERIENCES

---

### Hierarchical Deep Reinforcement Learning Framework for Board Games

Aug 2018 - Jan 2019

Shanghai Jiao Tong University - Machine Vision and Intelligence Group

Undergraduate Member

- Designed a Node-Weight based Algorithm implemented by C++ for the Chinese card game: Doudizhu(斗地主). The winning rate against real persons is above 40%
- Proposed a hierarchical reinforcement learning framework based on Deep Q Network using Tensorflow. Designed a model based on this framework and got a winning rate of more than 50% against the Monte-Carlo Tree Search method

## INTERN EXPERIENCE

---

### Beijing Wecash Wonder Technology Co., Ltd.

Jul 2018 - Aug 2018

Machine Learning Intern, Data Model Department

Beijing

- Assist in the completion of the feature engineering migration task of user data, responsible for the feature construction of user data from Eleme data sources (These Features relate to the location of the order, the number of orders, order amount, etc.)
- Made a jupyter-notebook extension using Tornado with which one can deploy the currently editing file onto a server ([view on my Github](#))
- Monitored and visualized a MySQL database, where 1,000,000+ user data were involved

## PROJECT EXPERIENCES

---

### COMAP's Mathematical Contest in Modeling (MCM)

Feb 2018 - Feb 2018

Meritorious Winner (First Prize)

Shanghai

- Developed a mathematical model based on 687 energy-related data of California, Arizona, New Mexico, and Texas over the past 50 years
- Succeeded in scoring and evaluating the energy use of each state in each year to build 4 energy profiles with the Collaborative Filtering Algorithm

### Asia and Pacific Mathematical Contest in Modeling

Nov 2017 - Nov 2017

First Prize

Shanghai

- Designed a model describing the relation between patients' sleep diseases and their own characteristics such as age, sex,

sleep time and other features of 5,000 sleep disorders

- Implemented a Decision Tree Algorithm to predict the possible diseases of patients

### **Dorahacks Hachthon**

*Sep 2017 - Sep 2017*

*First Prize, Enterprise Award*

*Shanghai*

- Crawled user data of MaiMai(脉脉) APP (with permission) using Requests library and Selenium library
- Analyzed one user's connection quality by the depth, width, influence and activity of his connection and drawn the user profile accordingly

### **SELECTED HONORS & AWARDS**

---

- |  |                 |
|--|-----------------|
| • Technology Innovation Scholarship                                | <i>Nov 2018</i> |
| • Excellent Academic Award   | <i>Oct 2018</i> |
| • Meritorious Winner of The Mathematical Contest in Modeling (MCM) | <i>Apr 2018</i> |
| • Bronze Medal of Google Cup Entrepreneurship Competition          | <i>Dec 2017</i> |
| • Ardien Enterprise Award  | <i>Nov 2017</i> |
| • Shanghai Jiaotong University Merit Student                       | <i>Oct 2017</i> |
| • Dorahacks First Prize  | <i>Sep 2017</i> |