# Yang-Ge Ma

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#### Education

#### National Taiwan University, Taipei, Taiwan

September 2015 - present

- B.S. of Computer Science and Information Engineering (CSIE), minoring in Mathematics
  - Expected to graduate in June 2019
  - GPA: 3.76/4.30
  - Two-year participation (2nd and 4th year) in ACM-ICPC programming contests
  - Selected Courses (where I got A or above): Data Structure and Algorithms, Algorithm Design and

Analysis, System Programming, Introduction to Mathematical Analysis, Introduction to Mathematical Logic

## Working Experiences

### Software Engineer Summer Intern, Taipei, Taiwan

Summer 2017

- Working at RD-ME team.
- Updating the auto-testing script for the newest version of a product
- Writing log parsers

## Research Assistant, Taipei, Taiwan

Fall 2017 - present

- Currently working on first order logic with two variables (FO-2)
- Advisor: Prof. Tony Tan

# Teaching Experiences

Teaching Assistant, Data Structures and Algorithms, CSIE, NTU

Spring 2018 & Spring 2019

- Instructor: Prof. Hsin-Mu Tsai
- Responsible for setting programming homework
- Offering weekly TA hours for helping and discussing with students
- Building and maintaining the course's online judge system

Teaching Assistant, Formal Languages and Automata Theory, CSIE, NTU

Fall 2018

- Instructor: Prof. Tony Tan
- Responsible for correcting homeworks and exams
- Offering weekly TA hours for helping and discussing with students

#### Lecturer, IOI Program, KCIS

Fall 2017 - Present

- A program that prepares high school students for various programming contests
- Teaching basic C++ programming and algorithms
- Assigning homework to students every week

## Student Group Experiences

Minister, Academic Department, CSIE Council

Fall 2017 - Spring 2018

- Leading a department of about 10 people
- Responsible for annual activities including TTC programming contest and freshmen academic camp
- Publishing special research introduction, according to our interviews to professors

## Course Projects

### Einstein Chess AI, Homework 2 of Theory of Computer Gaming

Fall 2018

- Language: C++
- Designing a Einstein Chess AI based on Monte-Carlo Tree Searching Algorithm
- Having a winning rate of over 80% against a pretty good greedy strategy

## Sokuban Solver, Homework 1 of Theory of Computer Gaming

Fall 2018

- Language: C++
- Designing a Sokuban solver based on various searching algorithms, including BFS, DFS and A\*
- Able to solve most Sokuban puzzles of size 50 within 30 seconds

# **Awards and Honors**

- 3rd place out of 125, ACM ICPC Asia Hanoi Regional, Vietnam	2018
- 1st place out of 88, ACM ICPC Asia Taiwan Online Programming Contest, Taiwan	2018
- 5th place out of 83, ACM ICPC Asia Daejeon Regional, Korea	2016
- <b>700th place</b> out of 3000, Google Code Jam Round 2	2016

## Skills

## - Programming Languages:

C/C++: 7-year experience
Python: 3-year experience
Shellscript: 3-year experience
Java: 1-year experience

- Operating Systems: Windows, Linux

- Others: algorithmic problem solving, mathematics

## Extracurricular

- Arranged a cademic affairs in the 2018 CSIE Summer Camp for high school students.
- Participated in the NTU Fire Dance Club in my senior year in college.
- Participated in the CSIE badminton team for 4 years.