# SIYUAN FENG

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### **Education**

# B.Sc. in Computer Science - Shanghai Jiao Tong University

Sept 2016 - Present

· Member of ACM Honors Class, which is an elite CS program for top 5% talented students.

## **Research Experience**

## APEX Data & Knowledge Management Lab - Shanghai Jiao Tong University

July 2018 - Present

- · Undergraduate Researcher, advised by Prof. Weinan Zhang and Prof. Yong Yu.
- · Research interests: Deep Reinforcement Learning and Natural Language Generation (NLG).

## **Teaching**

# MS106: Principle and Practice of Computer Algorithms - SJTU

Summer 2018

- https://acm.sjtu.edu.cn/wiki/PPCA\_2018
- · Student Instructor
- · Led the TA team (was one of the three lead TAs).
- · Maintained the Online Judge System for assignments and exams. And built a new judge core for it.
- · Instructed a group of students to implement a simplified Deep Learning System with some simple APIs which is same as those in TensorFlow.

#### CS147: Data Structures - SJTU

Spring 2018

- https://acm.situ.edu.cn/wiki/Data\_Structures\_2018
- · Teaching Assistant
- $\cdot$  Led the TA team (was one of the three lead TAs).
- · Prepared the course project (a railway ticket management system) with other TAs.
- · Prepared the course project (STLite in C++).

## CS151: C++ Programming (A) - SJTU

Fall 2017

- https://https://acm.sjtu.edu.cn/wiki/Programming\_2017
- · Teaching Assistant
- · Gave a lecture on C++ multithreading programming.
- · Prepared the course project (Quoridor Game) with other TAs.
- · Prepared the course project (OOP programming in C++) with other TAs.

## **Honors and Awards**

Zhiyuan Leadership Scholarship - Shanghai Jiao Tong University

2017

**Zhiyuan Honorary Scholarship** - Shanghai Jiao Tong University

2016 & 2017

The 9th Asia and Pacific Informatics Olympiad (APIO) - Bronze Medal

May 2015

# **Selected Projects**

## M-Compiler - A Compiler for Mx\* Language

- • https://github.com/Hzfengsy/M-Compiler
- $\cdot$  It is a compiler implemented in Java from scratch, and the source language is  $Mx^*$ , which is a C-and-Java-like language.
- · Implemented many optimizations for the compiler, which got it faster than gcc O1.
- · Final score: 95 / 100.

## RISC-V - A RISC-V CPU on FPGA

Fall 2017

Spring 2018

- https://github.com/Hzfengsy/RISC-V
- · Designed and implemented a FPGA-supported RISC-V CPU with 5-stage pipeline implemented in Verilog HDL.

**TitanFlow** - A Simple Deep Learning System

Summer 2017

- https://github.com/Hzfengsy/titanflow
- · Designed and implemented a simple Deep Learning System with some same APIs as TensorFlow.

## Al of Chinese Battle Chess - A Simple Al

Fall 2016

- • https://github.com/Hzfengsy/AI-of-Chinese-Battle-Chess
- · Course project of Programming 2016 (CS122), ACM Class, SJTU.
- · Project Rank: 3 / 48.