# **MENGYI SHAN**

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# **EDUCATION**

#### HARVEY MUDD COLLEGE, CLAREMONT, CA

Class of 2021

B.S. in Double Major in Computer Science and Mathematics. Major GPA: 4.0/4.0. Overall GPA: 3.8/4.0

- Relative courses (CS): Data Structure and Program Development, Principles & Practice: Computer Science, Computational Creativity, Computability and Logic, Computer science and Insights.
- Relative courses (Math): Statistics, Linear Algebra, Differential Equations, Discrete Math

# THE HIGH SCHOOL AFFILIATED TO RENMIN UNIV. OF CHINA, BEIJING, CHINA

Class of 2017

Early Development Program (EDP).

❖ 98% A/A+ in all courses. Class rank top 1%.

## SKILL

- Programming language: Python, Java, Wolfram Language, (beginner) C++
- Language: English, (bilingual) Mandarin Chinese, (beginner) Japanese
- ❖ Tool: MATLAB, Mathematica, R, Microsoft Office, (beginner) Photoshop

#### PROGRAMMING EXPERINCE

## STUDENT RESEARCHER ON NEURAL NETWORK, WOLFRAM INC.

2018.6 - 2018.7

- Project: Punctuation Restoration in English Text with Recurrent Neural Network
- Built and compared several neural net models with LSTM net and bidirectional net. Achieve 80% accuracy.
- Poster presented at Wolfram Research and posted with 'staff pick' on Wolfram Community.

## SOFTWARE ENGINEER INTERN, XINWEI TECH., BEIJING, CHINA

2018.7 - 2018.9

- Collaborated with several other interns, worked mainly in software development with Java.
- Used Socket and multithread processing to build online communication tool.
- Explored Android application development and GUI design.

### INDEPENDENT MACHINE LEARNING PROJECT OF SOUND ANALYSIS, BEIJING, CHINA

2016

- Developed a sound detection system with MATLAB to detect human voice in pop music.
- Involved usage of k-means clustering, MFCC and Gaussian Mixture Model to analyze sound wave.

# INTERACTIVE ADVENTRUE GAME, HARVEY MUDD COLLEGE, CA

2017

Developed an interactive game with Prolog. Used forward planning method.

## PRIZE AND CERTIFICATE

# CERTIFIED WOLFRAM TECHNOLOGY ASSOCIATE, WOLFRAM RESEARCH INC.

2018.7 - now

\* Ranked top 10 in the wolfram language coding competition. Certified student tech. associate.

# PUTNAM MATH COMPETITION, AMERICAN MATH ASSOCIATION

2017.12

Ranked 93th nationally. The first place in Harvey Mudd College's first year students. Honorable mentioned.

# ROBERT JAMES PRIZE AND RIF SCHOLARSHIP, HARVEY MUDD COLLEGE

2018.9

- Received Robert James Prize which is given to two outstanding sophomores in general mathematics study.
- \* Received RIF Scholarship which is given to a sophomore with distinguished performance in math competition.

### LEDAERSHIP AND VOLUNTEER

## **VOLUNTEER IN THE GLOBAL TRANSLATOR COMMUNITY, COURERA**

2018.7 - now

Help with translation of courses' scripts from English to Mandarin Chinese.

## **VOLUNTEER WOLFRAM STUDENT AMBASSADOR, WOLFRAM RESEARCH INC.**

2018.9 - now

Organize Wolfram Language and Mathematica learning seminars at Harvey Mudd College.

### VICE PRESIDENT, PUBLIC AFFAIR DEPARTMENT, CHINESE STUDENT ASSOCIATION, CLAREMONT COLLEGES

2017-2018

- Organized panel discussions, lectures and cultural activities.
- Wrote and managed weekly social media post.