# ERIC (JINGXIANG) GAO

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#### EDUCATION

Shanghai YKPao School IGCSE, IB Diploma Head Prefect of 7-Day Boarding Founder and Coach of Combatopia Chief programmer of FTC Team Treeman 8515 Member of Volleyball Varsity

**Carnegie Mellon University in Qatar** Undergraduate, Major in Computer Science

TECHNICAL STRENGTHS

Computer Languages	Python, C++, R, Bash
Software & Tools	HTML+CSS, VMD
Fields & Areas	Machine Learning, Computational Biology

#### EXPERIENCE

## SolvedChinese.org

Backend Developer

- $\cdot$  Designed SolvedChinese.org 2.0 version
- $\cdot\,$  Employed D jango to develop webpage templates
- $\cdot$  Established data update methods between Django database and frontend

## Research on the randomness of Mersenne Twister PRNG Jun Student Research

- Evaluated the mathematical randomness of the number generation process of Mersenne Twister Pseudo-Random Number Generator (default PRNG for Python3)
- $\cdot$  Established and mathematically proved 5 testing methods for holistic evaluation of randomness of PRNG

# ACADEMIC ACHIEVEMENTS

National Silver Award (2021) in International Linguistics Olympiads

Gold Award (2022) in Intermediate Biology Olympiad (Global top 5%)

Silver Division (2021) in USA Computer Olympiad

Silver Award (2022) in International Genetically Engineered Machines competition (Global)

**Other Courses** 

Social and Political Philosophy

Inspiration Award (2021) as team in First Tech Challenge (National)

#### **RELEVANT COURSES**

# Core Courses

Concepts of Mathematics Matrix and Linear Transformation Fundamentals of Programming and Computer Science

September 2019 - May 2022 IGCSE: A\* in all subjects. IB Grade: 41/42

> August 2022 - Present Overall Grade: Pending

Aug. 2020 - Feb. 2021

Jun. 2021 - Oct. 2021