**Ran Tao**

Trinity College, CB21TQ | 07340787034 | rt505@cam.ac.uk

**Education:**

2018 – present Trinity College, University of Cambridge

Part IA Class: 1

Part IB modules: Physics A, Physics B, Chemistry A

2014 – 2018 Western Reserve Academy, Class of 2018

GPA: 7.12 / 7 (1st eq.) | SAT: 1580 | ACT: 35

AP Scores:

Physics C 5

Chemistry 5

Statistics 5

Calculus BC 5

Computer Science 5

**Work Experience:**

June 2020 – September 2021: **Siemens MR MT Sponsorship**

* Internship program for two summers

December 2018 – January 2019: **College of Material Science and Engineering, Shenzhen University**

* Worked in a group focusing on using anode oxidation to produce materials with well-featured surface nanostructure
* Learned skills in anode oxidation and investigating surfaces with SEM

June – September 2018: **Waitan Jiaoyu Education Services**

* Worked as teaching assistant for the AMC 8 and AMC 12 online courses
* Corrected the students’ homework via online platform and offered guidance for math contests

July – August 2017: **International Science Summer Program at Heidelberg Institute for Theoretical Studies**

* Worked with a group specializing on constructing databases for clinical trial data
* Developed a computer program that analyzes geographic data to construct 3D maps and visualization
* Learned to program in Javascript and Python

**Activities:**

2018 - 2019: **Math Club**

* Elected as President in 12th grade
* Organize club meetings to prepare for state and national math competitions
* Achieved the highest AMC 12 score at Western Reserve Academy

2017 – 2018: **Science Club**

* Led a team in participation of
* Led projects to construct a food computer cultivating lettuce seeds.

2017 – 2018: **Digital Fabrication Club**

* Founded a club centered around digital fabrication
* Organized workshops for students to design products with CAD software
* Led projects to construct a food computer cultivating lettuce seeds.

2017 - 2018: **Biomedical Research**

* Cancer research to alter the immune system of mice
* Learned about targeted genome editing with CRISPR-cas9

2016 – 2018: **Reserve Scope**

* Founded Reserve Scope, an online school news publication
* Created the website and Facebook account
* Coordinated with photography club for student photos

2016 – 2018: **BUFO, Campus Literary Magazine**

* Submitted three short stories to BUFO each year
* Published story on BUFO -- “Rites of Insect,” “Deer on the Highway”

2017 - 2018: **Dormitory prefect at Bicknell House**

* Organized social events like pool competition and outdoor barbecue
* Designed dorm t-shirts

2014 – 2018: **Volunteer Services**

* Made sandwiches for the Akron Food Bank
* Harvested crops for local farms and bagged corn for redistribution
* Participated in chocolate cookies bake sale

**SUMMER PROGRAMS**

2015 – 2016: **Columbia University Summer Program**

* Surveyed a range of topics from advanced calculus to chaos theory
* Researched Fourier analysis and presented to the class

2014 – 2015: **AwesomeMath Summer Program at UC Berkeley**

* Took the two highest level classes offered at the camp: Geometry III and Combinatorics III
* Led a four-man team in a math competition, qualified for the final round of 16 teams out of over 50 teams

**HONORS AND AWARDS**

2017 – 2018 Inducted into Cum Laude Society

Silver Award at the Art and Writing Contest in short story category

Invited for interview for Gabelli Presidential Scholars Program

2016 – 2017 The University of Rochester Bausch + Lomb Honorary Science Award

8th place at Ohio High School Mathematics Invitational Olympiad (OHMIO)

Qualified for AIME with a score of 117 in the AMC 12

Gold Award in National German Examination Level 3

2015 – 2016 Western Reserve Academy Book Prize

1st place in state in TEAMS competition

5th place in Hydrology event at the Science Olympiad state contest

2nd place in World History Writing Contest

2014 – 2015 Western Reserve Academy Book Prize

1st place in state in TEAMS competition

Scored 11 in AIME and 110 in AMC 12

3rd place in Ohio Math League and participated in ARML on the state team

**Skills and Interests**

**Languages:** Mandarin (native), English, German (AP Level)

**Computing:** Proficient in Java, Matlab, Python

Competent with Javascript

**Interests:** Digital fabrication, Food computer