

RUIYAN MAGGIE HUANG

Mathematics, Art History, Astrophysics

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📍 Suzhou, China

EDUCATION

Suzhou Foreign Language School

📅 Sep 2016 – May 2018

United World College Changshu China

📅 Aug 2018 – May 2019

Pearson College UWC

📅 Aug 2019 – present

HONORS& REWARDS

- May 2019, top 5%, Euclid Mathematics Contest by University of Waterloo
- March 2019, Second price, China Thinks Big Second
- 2018, Third Place, ICP Workshop Global Final (Innovation and Challenge Projects for Teenagers)
- 2018, First Prize (China), Math League, qualified for US Final (at Stanford) and its Math Camp (co-held by the Departments of Mathematics of Princeton University, Columbia University and Williams College)
- 2017, Second Price, Jiangsu Junior High School Mathematics Competition
- 2017, Second Place (Global Final), The Berkeley Mini Math Tournament (BmMT)

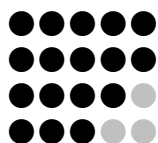
LANGUAGES & SKILLS

Chinese, English

LaTeX

Spanish

Python



PROGRAMS

Canada/USA Mathcamp

📅 Jun 2019–Jul 2019

- Study immersive mathematics with talented mathematicians from the world.
- Mainly dived into point-set topology and graph theory.
- Other classes include Cluster Algebra, Groups, Rings & Fields, Linear Algebra, Knot Theory, Non-Euclidean Geometry, Game Theory, Polytopes and polyhedra, Category Theory, Euler-Poincare Formula, Root System, Young Tableaux, Morse Theory, Manifolds, Markov Triples, and some introduction to Cohomology.

Individual Investigation on Cluster Algebra

📅 Jun 2019 – present

- individual investigation on Quasi-cluster Algebra of non-orientable surfaces.
- Finished proof on unisstructurality of cluster algebras from Mobius stripe without punctures.
- Now investigating the number of triangulation on a Mobius stripe without punctures.

Algebraic Geometry Online Program

📅 Sep 2019 – present

- 18 hours per week online lectures and workshop, 6 weeks
- Lecture contents include: Algebraic Varieties, Ringed Spaces, Projective Varieties, Grothendieck's Schemes, and the Applications of Scheme Theory

Exeter Summer Program

📅 Jul 2018–Aug 2018

- Take a 5-week long class on Relativity and Quantum Mechanics.
- Read the book *Dark Matter and Dinosaurs* by Harvard astrophysicist Lisa Randall, and *Relativity Simply Explained* by Martin Gardner.

ACTIVITIES

Diving

CAS, member, 11th grade

📅 4Hrs/Wk, 30Wks/Yr

- Have gone through training and get certified by PADI as an open water diver.
- Go diving in sites near campus to enhance understanding of our environment.
- Help organize the school diving room help with marine science investigations.
- Raise funds by ourselves to keep the program running and add new gears.
- It is a hard commitment not only because of the extreme temperature we have to endure in winter dives, but also for our responsibility to do something for the damaged ocean.

Metchosin House Community Service

CAS, member, 11th grade

📅 2Hrs/Wk, 20Wks/Yr

- Help with domestic service as well as farm work for the elderly in local communities.
- Give me a better understanding of the local community and Canadian culture.

U-CODE

Community service, core member, 10th grade

📅 4Hrs/Wk, 30Wks/Yr

- All members learned coding from scratch with the assistance of a teacher outside; teaching what we learned to local girls from Changshu; bilingual teaching to inspire change and break gender stereotypes.
- As the quickest learner, I helped my teammates and take the responsibility to design all the class outlines for the teaching; helped with all the designing, including the logo and the posters; responsible for all photo and video taking throughout the service.
- It was a new program, yet after a whole year's effort, the publicity went beyond local community, and is now well known throughout Suzhou area.

Architecture

CAS, member, 10th grade

📅 2Hrs/Wk, 15Wks/Yr

Kayaking

Club, member, 10th grade

📅 1Hrs/Wk, ~Wks/Yr