

Xiaole Zou

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Education

Imperial College London, Mathematics MSci (G103) Sep 2023 - Present

- Dean's List 2023/24
- Year 1 Total: 91.82 (See Grade Transcript)

Rugby School, Key Stage 4 and Sixth Form Sep 2018 - Jun 2023

- Awarded Wocester Mathematics Prize (Best Mathematician in Year), Mathematics Prize (Four In A Row)
- Relavent A-Levels: Mathematics (A*), Further Maths (A*), Physics (A*)

Research Experience

Bertrand's Paradox [Tom Rocks Maths Essay Competition] (Shortlisted Essay) Jul 2023

- Explaining Bertrand's Paradox in an article-like format.
- Entered into essay competition and became one of nineteen to be shortlisted and showcased online.
- "Clearly explains one of the most confusing paradoxes in mathematics, which requires great skill." - comment by Dr. Tom Crawford, University of Oxford

From Gossip to Gospel [Individual Research Project] (90/100) May 2024 - Jun 2024

- Employing an Ising-like model to predict the spread of rumours in a secondary school year group.
- Generated a pseudo-random network of students and applied Monte-Carlo simulations.

Does a Maths Person Really Exist? [Individual Report] Oct 2022 - Dec 2022

- Investigating the existence of "Mathematical Talent" based on varying physical and mental factors.
- Compiled findings into a four page report for the academic journal of Rugby School.

Bitcoin Price Prediction using Deep Learning [Group Research Project] Jul 2021

- Using a combination of LSTM and regular nerual networks to predict the price of bitcoin.
- Was awarded "Super Brain" in recognition of contributions to the group project.

Other Experiences

Maths Made Simple [Personal Mathematics Blog] Jul 2024 - Present

- Publishing bi-weekly articles on varying topics in mathematics on WeChat.
- Example article: **A Brief History of 0** (Also published in Felix - Imperial Newspaper)

Ritangle Team Maths Challenge [Team Member] Sep 2022 - Dec 2022

- Working as a team to solve fun mathematical problems of varying difficulty.

Hall Society [President] Sep 2022 - Mar 2023

- Organizing extracurricular talks for student and staff. Gave the first talk on complex numbers.

Honours and Awards

- Unique Winner of David Gregory Prize (Loyalty and Concern in School Community) Jun 2023
- Unique Winner of Whitelaw Prize (Recognition for Contributions In House) Jun 2023
- UKMT SMC Gold (Best in Year) Nov 2021

Skills, Certifications and Others

Languages: English (IELTS 8.5), Mandarin (Native Speaker)

Interests: Football (IC Chinese Society Football Club), Rubik's Cube (SSZ Certified Officer)

Activities: Volunteering (35km walk in Tianjin for Charity, aiding students with visual impairment)