Ryan Joo Rui An

+65 8287 6889 ○ Singapore, SG

joo.ruian.ryan@dhs.edu.sg ○ linkedin.com/in/ryan-joo-rui-an ○ ryanjoo18.github.io

Summary

High school student skilled in analytical thinking and problem-solving. Excelled in mathematics olympiads, proficient in programming and experienced with relevant mathematical software. Collaborative team player with strong project management skills and a commitment to continuous learning.

Education

- **GCE A-Level** — 2023 – 2024
  Dunman High School — Singapore, SG
- **GCE O-Level** — 2021 – 2022
  Chung Cheng High School (Main) — Singapore, SG
  - L1R5: 6 (raw), 4 (nett), A1 in Mathematics, Additional Mathematics, Physics, Chemistry, Biology
  - Dr. Chuang Chu Lin Scholarship for 1st in Standard
  - Chuang Weilang Mathematics Award
  - Bilingual Award for Excellence in English and Higher Chinese, Best in Additional Mathematics (Secondary Three) Award, Best in Mathematics (Secondary Three) Award
- **UEC Junior** — 2019 – 2020
  Chong Hwa Independent High School — Kuala Lumpur, MY
  - Overall Second Position in Junior Middle One
  - Top Scorer Prize in Science, Top Scorer Prize in Mathematics, Top Scorer Prize in English Language, Top Scorer Prize in Bahasa Malaysia, Overall Second Position in Junior Middle One

Experience

- **Dietetics Intern** — Dec 2023
  Sengkang General Hospital — Singapore, SG
  - Acquired foundational knowledge of dietetics profession and infection control protocols; gained insight into therapeutic diets for various medical conditions, contributing to the development of personalised meal plans for patients.
  - Shadowed dieticians in inpatient and outpatient settings, including tube feeding and nutritional support cases.
- **Teaching Intern** — Nov 2022 – Dec 2022
  Cemerlang Bakti Tuition Centre — Selangor, MY
  - Conducted mathematics olympiad classes for 10 students, developed and delivered lesson plans focusing on problem-solving techniques, mathematical reasoning, and critical thinking skills; achieved advancements in students' problem-solving skills and mathematical comprehension.

Skills

- **Programming**: Python, LaTeX, R, HTML, CSS, JavaScript
- **Libraries**: numpy, pandas, matplotlib, seaborn, scikit-learn
- **Softwares**: VS Code, GitHub, Overleaf, TeXstudio, RStudio, Google Colab, Kali Linux
- **Languages**: English (native), Chinese (native), Malay (native), German (limited proficiency)

Projects

- **Personal website** | Website which contains information about myself, my publications, projects and notes I have written, as well as some useful resources for Mathematics, Physics and programming competitions.
- **Analysing Happiness: Understanding Determinants Across Global Contexts** | Jupyter Notebook project which analyses data from World Happiness Report 2023 to determine most important factor contributing to happiness of a country.
- **Mini projects** | Small-scale coding projects for personal enrichment, including snake game and flashcard program.

Publications

- **In The Labyrinth** | Book which contains my notes when self-studying university mathematics. (in writing)
- **Mathematics Olympiad: A Guidebook** | Book which provides expert guidance and practice problems to excel in mathematics olympiad competitions. (in writing)
- **Physics Olympiad: A Guidebook** | Book which provides expert guidance and practice problems to excel in physics olympiad competitions. (in writing)

Achievements

Honours

- Recipient of **ASEAN Scholarship** in 2020, offered by Ministry of Education of Singapore to bright young students from ASEAN countries to study in Singapore
- Member of **Malaysian Mensa Society**, **Mensa International** since 2020, Test Reference Number: MY023479

Awards

- **Singapore Mathematics Olympiad** 2022 – 2023: 2 Silver awards
- **Singapore and Asian Schools Math Olympiad** 2019 – 2023: 5 Gold awards, top in Singapore in 2023
- **Australian Mathematics Competition** 2019 – 2023: 2 Prize awards, 2 High Distinction awards, best in school in 2023
- **Singapore Astronomy Olympiad** 2024: Bronze award
- **High School Mathematical Contest in Modeling** 2023: Honourable mention
- **Singapore Physics Olympiad** 2023: Bronze award
- **Singapore Junior Chemistry Olympiad** 2022: Bronze award
- **Malaysian Computing Challenge** 2020 – 2021: 2 Gold awards
- **Hua Lo Geng Secondary School Mathematics Competition** 2019: 2nd place
- **Chen Jingrun's Cup Secondary School Mathematics Competition** 2019: 1st place

Activities & Extracurriculars

- Committee member of **Befrienders Programme** 2024: Implemented training programme for 100 Year 5 students to become student befrienders, empowering them with effective communication and mentorship abilities; resulted in successful integration of incoming O-Level students into school community.
- Secretary of **Class Committee**: Managed the collection of funds for the class fund, overseeing financial transactions and ensuring transparency and accountability in fund management. Coordinated discussions, planning sessions, and execution of class activities aimed at fostering bonding among classmates.
- Member of **Mathematics Society**: Planned and executed Math Week, aimed at promoting Mathematics to students through games and exhibitions.
- Member of **Infocomm Club**: Enrolled in a Swift programming course to develop mobile applications. Participated in learning journey to Open Governmental Products, gained insights into development of user-friendly websites and applications.
- Committee member of **Chinese Chess Club**: Communicated with various stakeholders in planning and execution of Chinese chess competition, aimed at fostering heightened interest in Chinese chess among club members.
- Secretary of **Academic Research Society**: Documented meeting minutes, coordinated planning and execution of events aimed at cultivating deeper interest in mathematics among club members; provided mentorship and guidance to club members.
- Member of **Chess Club**: Represented school and achieved excellent results in chess tournaments at the inter-school, inter-state, national and international levels.

Community Service

- **Volunteer tutor** at Springfield Secondary School: Tutored 20 students in need of assistance in Mathematics and Science subjects. Designed and delivered personalised tutoring sessions tailored to individual student needs, targeted specific areas for improvement; led to improvement in students' academic performance.
- **Volunteer teaching assistant** at Brahm Centre: Communicated with 10 seniors, provided practical guidance in utilising mobile application; improved their digital proficiency and technological competence.
- **Volunteer** at Willing Hearts: Assisted in operating a daily soup kitchen. Prepared, cooked and distributed 200 meals every day to the elderly, disabled individuals, low-income families, children from single-parent households, and migrant workers.