

# Ryan Joo Rui An

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## Education

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<b>Singapore-Cambridge GCE A-Level</b> Dunman High School 90/90 RP, including A in H2 Mathematics, Distinction in H3 Mathematics	2023 – 2024
<b>Singapore-Cambridge GCE O-Level</b> Chung Cheng High School (Main) L1R5 raw 6 nett 4, including A1 in Mathematics and Additional Mathematics Best in Additional Mathematics, Mathematics in 2021	2021 – 2022

## Experience

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<b>Teaching Assistant</b> SJK(C) Jalan Davidson	Jan 2025 –
<ul style="list-style-type: none"><li>Assisted in delivering mathematics olympiad lessons to 20+ students between ages of 7 and 8.</li></ul>	
<b>Teaching Intern</b> Cemerlang Bakti Tuition Centre	Nov 2022 – Dec 2022
<ul style="list-style-type: none"><li>Developed comprehensive teaching materials for mathematics olympiad training.</li><li>Conducted lessons for students of various ages, delivering structured lesson plans on problem-solving techniques, mathematical reasoning, and critical thinking.</li></ul>	

## Projects

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<b>Topics in Undergraduate Mathematics</b>	(in writing)
<ul style="list-style-type: none"><li>My notes when self-studying undergraduate mathematics.</li></ul>	
<b>Mathematics Olympiad: A Guidebook</b>	(in writing)
<ul style="list-style-type: none"><li>Notes comprising various topics in mathematics olympiad.</li></ul>	
<b>Different Sizes of Infinity</b>	2024
<ul style="list-style-type: none"><li>Exhibition poster which discusses the cardinality of infinite sets, designed for the Mathematics Week at my school.</li></ul>	
<b>Fires and Hotspots</b>	2023
Presented during Space Faculty Remote Sensing Workshop	
<ul style="list-style-type: none"><li>Conducted geospatial analysis on fire hotspots in South Sumatra using Sentinel-2 and FIRMS datasets, identifying high-confidence fire zones (<math>&gt; 90\%</math> probability) across a large AOI (<math>\approx 50,000 \text{ km}^2</math>).</li><li>Processed multi-spectral satellite imagery, applying True Color, False Color (NIR), and SWIR composites to visualize smoke plumes and burned areas.</li></ul>	

## Selected Achievements

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<b>Singapore Mathematics Olympiad</b> Silver awards.	2022 – 2024
<b>Singapore International Mathematical and Computational Challenge</b> Merit award.	2024
<b>Australian Mathematics Competition</b> Prize awards in 2019, 2021, High Distinction awards in 2022, 2023, 2024.	2019 – 2024
<b>High School Mathematical Contest in Modeling</b> Honourable mention.	2023
<b>Chuang Wei Lang Mathematics Award</b> Awarded for outstanding results in mathematics.	2021
<b>Dr Chuang Chu Lin Scholarship</b> Awarded for 1st in Standard	2021

<b>ASEAN Scholarship</b> – Ministry of Education, Singapore Awarded to bright young students from ASEAN countries to study in Singapore.	<i>2020</i>
<b>Malaysian Mensa Society</b> Membership, Test Reference Number: MY023479.	<i>2020</i>
<b>Hua Lo Geng Secondary School Mathematics Competition</b> 2nd place.	<i>2019</i>
<b>Chen Jingrun's Cup Secondary School Mathematics Competition</b> 1st place.	<i>2019</i>