Curriculum Vitae

Full Name	**Dylan K.D Phung**
Occupation	Enrolled in Advanced CS (Honours) Pure Mathematics Major
Location	Monash University, Clayton Campus, Australia
Email	dphu0006@student.monash.edu dylan.kydang.phung@gmail.com
Telephone	Mob: +61 403 789 781
Version	Feb 2025

Summary

I a freshman at Monash with a great passion for science, mathematics, AI and informatics, especially researching into interesting problems and performing thought experiments. I have co-authored mathematics papers published in international peer-reviewed journal and magazine. I was one of the six students officially representing Australia at the Asia Pacific Informatics Olypiad (APIO) 2022 and won a Silver Medal in 2024 rank #1 among Australian team. I'm a critical thinker and always curious for knowledge. My strengths include the ability to think outside the box and finding innovative solutions to problems. My noticeable personal traits are my objectivity and honesty. Two fun facts about me: I was voted by my peers at the School Year 11 Social Dinner as "most likely to win a Nobel *Peace* Prize", and I'm currently holding my school at Yarra Valley Grammar annual Pi-off competition record for reciting the most digits of Pi - 988 places.

I'm interested in researching, discovering the world, working in a STEM research job, and looking for opportunities to learn and contribute.

Publication

- Markowsky, G. & **Phung**, D. (2021). Remarks on results by Muger and Tuset on the moments of polynomials. *Indagationes Mathematicae*, 32(2), 394-397.
- Markowsky, G., **Phung**, D. & Treeby, D. (2022). A Geometric Generalization of the Pythagorean Means. *Mathematics Maganize*, 95:5, 520-524.

Programming Skills

Programming Languages	C++ (advanced), Python (intermediate), TensorFlow (intermediate), Pytorch (introductory), Java Script (introductory)

Work Experience and Volunteer Work

2024 - now	**AI Internship** at VinAI Research, working on using AI to solve math problems (e.g., AlphaGeometry) and reasoning in LLMs.
2024 - now	**Volunteer** at Salvation Army, Mitcham, Victoria, Australia.
2020 - 2023	**Founder**. *Neurodiversity Group at Yarra Valley Grammar School* (2023), volunteer at various fundraising and community events (raising money for the Leukaemia Foundation via Greatest Shave 2020, 2021, 2022 & 2023, raising money for the Royal Children's Hosptial via Selling AFL posters on Grand Final Day at MCG 2022 and attending Good Friday Appeals 2023, Cleaning and Weeding at local Reserve).
Jul 2022 - Sep 2022	**Volunteer** to assist young students at the School Junior Coding Club during lunch break once a week.
20-24 Jun 2022	Year 10 Work Experience at School of Mathematics, Monash University.

Educational Experience

Dec 2023	Invited and attended the *National Mathematics Summer School* for motivated and high-achieving school students, Australian National University (ANU).
Apr 2021, 2022 & 2023	Attending the *Australian Informatics Olympiad Committee (AIOC) Selection School*, a training school by invitation only for students up to year 12 aiming to develop informatics skills, train and identify students to potentially represent Australia at the International Informatics Olympiad (IIO).
Dec 2021 & 2022	Attending the *The Australian Mathematical Olympiad Committee (AMOC) School of Excellence*, a training school by invitation only for students up to year 11, aiming to develop mathematical problem-solving skills, train and identify students to represent Australia at the International Mathematical Olympiad (IMO).
Dec 2019 & 2020	Attending the *Australian Informatics Olympiad Committee (AIOC) School of Excellence*, training school by invitation only for students up to year 11, covering advanced topics in informatics, which are usually taught in second or third year university, aiming to train and select students to represent Australia at the IIO.
2018 - 2023	Attending various science experiences (Yarra Valley Grammar School - Science Tour Far North Queenland 2023, Monash University - MySci 2023, Swinburne University of Techonology - The ConoccoPhillips Science Exprerience 2019, The University of Melboune - Mission Discovery 2018).

Selected Achievements and Awards

2024 **Silver Medal**. Asia-Pacific Informatics Olympiad (APIO) - *representing Australian Informatics team* (rank #1, https://apio2024.org/ranking)

2024 **Winner of the Pi Off competition** at Yarra Valley Grammar School - *reciting 988 places.*

2023 **Silver**. The Australian Mathematical Olympiad (AMO) Contest.
Outstanding Award. Melbourne University School Mathematics Competition.
Bronze. French-Australian Regional Informatics Olympiad (FARIO).
Silver. Australian Informatics Olympiad (AIO).
High Distinction. Australian Biology, Chemistry and Physics Olympiads.
Selected to attend *both* the National Computer Science Summer School, and the National Mathematics Summer School.

2022 *Representing Australia* at the Asia Pacific Informatics Olympiad (APIO) Egypt 2022.
Gold. Australian *Mathematical* Olympiad Committee Senior Contest
Gold. Australian *Informatics* Olympiad (AIO)
Silver. FARIO.
Bronze. AIIO.
High Distinction. Australian Science Olympiad in *Chemistry*.
Distinction. Australian Science Olympiad in *Physics*.
Invited to attend both The Australian *Informatics* Olympiad Committee Selection School, and The Australian *Mathematical* Olympiad Committee Selection School.

2021 **Gold**. Australian Informatics Olympiad (with perfect score).
Silver. AIIO; Participant. FARIO
Prize winner. Australian Mathematics Competition (AMC),
High Commendation. The University of Melbourne Mathematics and Statistics Research Competition
Outstanding Award Winner. The University of Melbourne School of Mathematics Competition.
Invited to attend both The Australian Informatics Olympiad Committee School of Excellence, and The Australian Mathematical Olympiad Committee School of Excellence.

2020 **Gold**. AIO; **Prize winner**. AMC.
High Distinction. Maths Enrichment, Australian Maths Trust.
Perfect Score. Oxford University Computing Challenge.
High Distinction. Australian Science Olympiad Junior.
Exemplary. The University of New South Wales Reach Assessments.

2019 **Silver** AIO; **High Distinction** AIMO and AMC.
Outstanding Award. UNSW Global Reach Assessments in Science.
Outstanding Award Winner. The University of Melbourne School of Mathematics Competition,
HD Excellence. ANCQ Chemistry Quiz.
Distinction. Australian Science Olympiad in Chemistry.
Satisfactory Completion of VCE Chemistry Units 1/2 (while in grade 7).

2018 **High Distinction**. Mathematics Challenge for Young Australians
Satisfactory Completion of VCE Specialist Mathematics Units 1/2 & and VCE Physics Units 1/2 (while in grade 6).

2017	**SAT (Scholastic Aptitude Test) subject tests**, standardized tests widely used for college admissions in the United States, scores: 730/800 (Math Level 1), 730/800 (Math Level 2), 740/800 (Chemistry), 780/800 (Physics) (while in grade 5),
	Prize winner. AMC.
2016	Satisfactory Completion of VCE Methods Mathematics Units 1/2 (while in grade 4).
2015	**High Distinction** .Mathematics Challenge for Young Australians, **Recognition of Extraordinary Achievement in Maths and Science**, School Award, Christian Colleage, Geelong.

References

Available upon request.