

Visarut Huayshelake

visarut.hu@gmail.com | github.com/minette3762 | [linkedin.com/in/visarut-hu/](https://www.linkedin.com/in/visarut-hu/) | minette3762.github.io

EDUCATION

Chulalongkorn University <i>Ph.D. Student in Applied Mathematics and Computational Science</i> • Interim enrollment while securing placement for Ph.D. studies abroad under the DPST Scholarship requirements • Relevant Coursework: Elementary Machine Learning, Time Series Analysis	Bangkok, Thailand Aug 2025 — Present
Chulalongkorn University <i>M.Sc. in Applied Mathematics and Computational Science</i> • Thesis: Two-Dimensional Simulation of Contaminant Transport and Treatments in Groundwater System • Relevant Coursework: Numerical Analysis I, Applied Linear Algebra, Applied Analysis, Method of Applied Mathematics	Bangkok, Thailand Aug 2022 — Sep 2025
Kanazawa University <i>M.Sc. in Computational Mathematics (Double Degree Program With CU)</i> • Thesis: Lagrange-Galerkin Scheme for Groundwater Contaminant Models • Relevant Coursework: Applied Analysis a & b, Data Science in Society 5.0	Ishikawa, Japan Oct 2022 — Aug 2024
Walailak University <i>B.Sc. in Computational Science (First Class Honors)</i> • Project: Two-dimensional numerical simulation of pollution diffusion from a waste dump • Relevant Coursework: Real Analysis I & II, Introduction to FEM, Introduction to Numerical Methods for PDEs	Nakhon Si Thammarat, Thailand Jul 2018 — Apr 2022

SCHOLARSHIP

The Development and Promotion of Science and Technology Talents Project Scholarship (DPST) <i>Royal Government of Thailand</i>	2018 — Present
--	----------------

PUBLICATION

- **Huayshelake, V.** and Mekchay, K. (2025). Numerical Simulation of Contaminant in Transient Groundwater System. *AMM 2025 Conference Proceedings*, Thailand.

SELECTED TALKS

- Numerical Simulation of Contaminant in Transient Groundwater System, *The 29th Annual Meeting in Mathematics*, Bangkok, Thailand, May. 2025.
- Sum of Products of Two Consecutive Primes, *The 48th International Congress on Science, Technology and Technology-based Innovation*, Nakhon Si Thammarat, Thailand, Dec. 2022.

TEACHING AND PUBLIC OUTREACH

Calculus II (International Program) Teacher Assistant • Graded weekly quizzes and provided feedback to support student learning and improvement • Led tutoring sessions to prepare students for midterm and final examinations	2025, 2024
Calculus for Business I (International Program) Teacher Assistant • Graded weekly quizzes and assigned homeworks • Led tutoring sessions to prepare students for midterm and final examinations	2025
Basic in Calculus (International Program) Teacher Assistant • Advised incoming students on problem-solving strategies for university calculus • Provided feedback on student exercises to reinforce foundational concepts	2025

RESEARCH SKILLS

- **Scientific Computing and Simulation:** Experience in implementing numerical solvers for PDEs using C++ and FreeFEM
- **Mathematical Analysis:** Proficient in convergence analysis and energy estimate for numerical schemes
- **Machine Learning Interest:** Currently studying Deep Learning frameworks and Physics-Informed Neural Networks (PINNs) to bridge numerical methods with AI
- **Programming and Tools:** Python, C++, MATLAB, FreeFEM, Git

SKILLS

- **Languages:** Thai (Native), English (TOEFL-ITP 550), Japanese (JLPT N4)
- **Documentation Tools:** LaTeX, Microsoft Office