

Visarut Huayshelake

visarut.hu@gmail.com | github.com/minette3762 | linkedin.com/in/visarut-hu/ | minette3762.github.io

EDUCATION

Chulalongkorn University

Ph.D. Student in Applied Mathematics and Computational Science

Bangkok, Thailand

Aug 2025 — Present

- Interim enrollment while securing placement for Ph.D. studies abroad under the DPST Scholarship requirements
- Relevant Coursework: Elementary Machine Learning, Time Series Analysis

Chulalongkorn University

M.Sc. in Applied Mathematics and Computational Science

Bangkok, Thailand

Aug 2022 — Sep 2025

- 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

Kanazawa University

M.Sc. in Computational Mathematics (Double Degree Program With CU)

Ishikawa, Japan

Oct 2022 — Aug 2024

- Thesis: Lagrange-Galerkin Scheme for Groundwater Contaminant Models
- Relevant Coursework: Applied Analysis a & b, Data Science in Society 5.0

Walailak University

B.Sc. in Computational Science (First Class Honors)

Nakhon Si Thammarat, Thailand

Jul 2018 — Apr 2022

- 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

SCHOLARSHIP

The Development and Promotion of Science and Technology Talents Project Scholarship (DPST)

Royal Government of Thailand

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)

2025, 2024

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

Calculus for Business I (International Program)

2025

Teacher Assistant

- Graded weekly quizzes and assigned homeworks
- Led tutoring sessions to prepare students for midterm and final examinations

Basic in Calculus (International Program)

2025

Teacher Assistant

- Advised incoming students on problem-solving strategies for university calculus
- Provided feedback on student exercises to reinforce foundational concepts

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