

# Thanh C. Nguyen

[Email](#)  [Linkedin](#)

## EDUCATION

University of Michigan - Ann Arbor

Starting Fall 2025

Ph.D in Statistics

Fulbright University Vietnam

2021 - 2025

B.Sc. in Applied Mathematics and Computer Science

- **Major GPA:** 3.95/4.00.
- **Relevant Coursework:** Linear Algebra, Real Analysis, Probability, Discrete Math, Optimization, Statistical Learning, Mathematical Statistics, Data Structures, Algorithms, Object-Oriented Programming.
- **Awards:**
  - Gold Medals (Ranked 1st) in Analysis subject at the Vietnam Undergraduate Mathematical Olympiad 2024.
  - Gold Medals in Algebra subject at the Vietnam Undergraduate Mathematical Olympiad 2024.
  - Awarded the Undergraduate Scholarship for Excellence in Mathematics, a prestigious scholarship for outstanding mathematics students granted by the Ministry of Education and Training of Vietnam and the Vietnam Institute for Advanced Study in Mathematics (VIASM), 2024.

## RESEARCH EXPERIENCE

Covariance Estimator Research

Sep 2024 - Present

- Advisor: Prof. Hoi H. Nguyen, Ohio State University.
- Researching efficient sub-Gaussian estimators for high-dimensional covariance matrices.
- Exploring advanced statistical tools including concentration inequalities, symmetrization techniques, and empirical processes.

Random Matrix Theory Research

Feb - Jul 2024

- Advisor: Prof. Linh Tran, Fulbright University Vietnam
- Investigated key results in Random Matrix Theory, such as the Semi-Circular and Marcenko-Pastur Laws.
- Applied advanced linear algebra and perturbation theory techniques to analyze matrix models.

## TEACHING EXPERIENCE

Teaching Assistant | Fulbright University Vietnam

2022 - Present

- Assisted with lectures, office hours, grading, and solutions for courses including Linear Algebra, Real Analysis, Probability, and Discrete Mathematics.

Mathematical Olympiad Trainer | Star Education & Freelancer

2020 - Present

- Coached over 100 students in Analysis and Euclidean Geometry, contributing to several national awards.
- Mentored 20+ students who won awards at the Vietnamese Mathematical Olympiad, including two First Prizes and a Bronze Medal at the International Mathematical Olympiad (IMO).

Mathematical Summer School Mentor | Vietnam Mathematical Society

2020 - 2023

- Led an intensive two-week program designed to prepare students for the National Mathematical Olympiad.
- Provided lectures, designed mock exams, and offered personalized feedback to students.

## OTHER EXPERIENCES

Application-Driven Mathematics Program ([Program's information](#))

Jul 2024 - Dec 2024

- Completed a six-month research program held by VinBigData focusing on applied mathematics and data science.
- Took courses such as Foundations of Machine Learning, Deep Learning from First Principles, High-Dimensional Probability, and Spectral Graph Theory.

#### **Summer School on Mathematical Statistics and Machine Learning** ([Program's information](#)) Jul 2024

- Participated in a week-long intensive program organized by the Vietnam Institute for Advanced Study in Mathematics (VIASM) in Hanoi.
- Attended lectures by leading experts, including Prof. Alexandre Thiery (National University of Singapore), Prof. Ji Zhu (University of Michigan, Ann Arbor, USA), and Prof. Minwoo Chae (Pohang University of Science and Technology, Korea).
- Engaged in comprehensive coursework covering foundational and modern topics in mathematical statistics and machine learning.

#### **Pre-Vietnamese Mathematical Olympiad**

2020 - 2022

- Role: Organizing Committee, Jury.
- Organized events, coordinated with team representatives, and designed competition problems.
- Attracted over 350 participants (75% of all candidates in the National Olympiad).

#### **Co-author of Mathematical Olympiad Books**

2020 - 2023

- Collaborated with Trần Nam Dũng, primary author of the official Math textbooks of Vietnam, to write books for Olympiad students.

#### **SKILLS**

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- **Technical:** Python, Java, R, Matlab, LaTeX.
- **Languages:** Vietnamese (Native), English (Advanced).

#### **REFEREES**

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- Hoi H. Nguyen, Professor of Mathematics, Ohio State University [nguyen.1261@osu.edu](mailto:nguyen.1261@osu.edu).
- Linh Tran, Associate Professor of Mathematics, Fulbright University Vietnam [linh.tran@fulbright.edu.vn](mailto:linh.tran@fulbright.edu.vn)
- Hieu Nguyen, Associate Professor of Mathematics, Dean of Undergraduate Programs, Fulbright University Vietnam [trunghieu.nguyen@fulbright.edu.vn](mailto:trunghieu.nguyen@fulbright.edu.vn)