Phong Thuan Ho
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LinkedIn | Portfolio | Github | ORCID

Education

2025 – *Ongoing* University of Alberta, **MSc. Statistical Machine Learning** (Supervisors: Dr. Abigail Azari & Dr. Jay Newby)
Research Topic: Non-Equilibrium Reconstruction of Solar Wind Velocity Distribution Function

2019 – 2023 University of Alberta, **BSc. Mathematics, Minor Physics** (Graduated with Distinction)

Research Experience

2025 – *Ongoing* **Master's Student in Statistical Machine Learning** - Supervisors Dr. Abigail Azari & Dr. Jay Newby
University of Alberta - Department of Mathematical and Statistical Sciences

June 2026 **Invited Collaborator** - ISSI International Team 24-612 (Lead: Dr. Kris Klein)
International Space Science Institute (ISSI) - Bern, Switzerland
Project: Excitation and Dissipation of Kinetic-Scale Fluctuations in Space Plasmas

Teaching Experience

2025 – 2026 **Teaching Assistant**
University of Alberta – Department of Electrical and Computer Engineering

- ECE 342 - Probability for Electrical and Computer Engineers

September 2026 **Guest Lecturer**
University of Alberta – Department of Electrical and Computer Engineering

- ECE 342 - Probability for Electrical and Computer Engineers (*Topic: Counting Methods & Random Variables*)

Societies and Committees

2024 - 2027 **Students in Graduate Mathematic and Statistics Executive Team** (Outreach Coordinator)

2024 - 2025 **Faculty Graduate Post Studies Council** (Department Councilor)

2024 – 2025 **Graduate Student Association Council** (Department Councilor)

2022 - 2024 **Students in Graduate Mathematic and Statistics** (Member)

2019 – 2023 **Undergraduate Mathematics and Statistics Society** (Member)

2019 – 2023 **Undergraduate Physics Society** (Member)

Presentations

May 2026	"**Non-Equilibrium Modeling Approaches for Velocity Distribution Functions with Machine Learning Methods**" Space Physics Seminar. University of Alberta, Edmonton, AB
March 2026	"**A Background on Solar Probe Analyzer—Ions Aboard Parker Solar Probe**" Azari Research Group Lab. University of Alberta, Edmonton, AB
March 2026	"**Velocity Distribution Function: Slepian Reconstruction**" Math Bio Journal Club. University of Alberta, Edmonton, AB
January 2026	"**Velocity Distribution Function: Slepian Reconstruction**" Azari Research Group Lab. University of Alberta, Edmonton, AB
December 2025	"**Performance Metrics: Comparing PPO and TRPO Across Multiple Evaluation Criteria in MuJoCo Environments**" Reinforce Learning Class Presentation. University of Alberta, Edmonton, AB
October 2025	"**Normalizing Flow for Density Estimation**" Azari Research Group Lab. University of Alberta, Edmonton, AB
October 2025	"**Normalizing Flow for Density Estimation**" Math Bio Journal Club. University of Alberta, Edmonton, AB
March 2025	"**Measuring Quality: Time Series Analysis**" Statistical Consulting Class Presentation. University of Alberta, Edmonton, AB
December 2024	"**Analyzing the Arms Race and Mutual Fear Between the US & China**" Mathematical Modeling Class Presentation. University of Alberta, Edmonton, AB
November 2024	"**Forecasting Syphilis Deaths with Improved Testing Strategies**" Mathematical Modeling Class Presentation. University of Alberta, Edmonton, AB
April 2023	"**Dry Bean Characteristics: A Classification Analysis**" Data Mining Class Presentation. University of Alberta, Edmonton, AB

Conferences

June 2026	**Solar Wind 17**, Poster Presenter, Apex Bath, Bath United Kingdom
May 2026	**Upper Bound AI Conference**, Attendee. Edmonton Convention Centre Edmonton, AB
May 2026	**Alberta Mathematics Dialogue**, Attendee. MacEwan University, Edmonton, AB
September 2024	**44th Annual Meeting of Alberta Statisticians**, Attendee. University of Calgary, Calgary, AB