Thi Phuong Thuy Vo

Graduate Teaching Assistant and Researcher · PHD in Applied Mathematics

1 Passage du jeu de Boules, 75011 Paris, France

☎ (+33) 07 58 69 46 89 | ✉ phuongthuywz@gmail.com

Personal Information

Full name	Vo Thi Phuong Thuy.
Day of birth	25/09/1992.
Sex	Female.
Place of birth	Quang Ngai, VIETNAM.
Nationality	Vietnamese.
Work address	Université Gustave Eiffel, 5 Boulevard Descartes, 77420 Champs-sur-Marne, France.
Marital Status	Single.

Education

University Paris 13   *Villetaneuse, France*
PHD student in applied mathematics   *Sep. 2016 - Aug. 2019*

- Thesis: ***Exploration of random graphs by the method Respondent Driven Sampling***.
- Supervisor: **Jean-Stéphane Dhersin** (University Sorbonne Paris Nord).
- Co-supervisor: **Viet Chi Tran** (University Gustave Eiffel).

University Sorbonne Paris Nord   *Villetaneuse, France*
Master 2   *Sep. 2015-Aug. 2016*

Institute of Mathematics   *Hanoi, Vietnam*
Master 1   *Sep. 2014-Aug. 2015*

University of Education - Hue University   *Hue, Vietnam*
Bachelor of Pedagogy in Mathematics   *Sept. 2010-Jul. 2014*

Teaching Experience

University Gustave Eiffel   *Champs-sur-Marne, France*
Attaché Temporairement d'Enseigment et de Recherche (ATER)   *Sept. 2020 - Now*

Graduate teaching assistant to Mathematics courses:

- Probability and Statistics for the 2nd-year of Economics and Managements.
- Analysis for the 1st-year of Economics and Managements.
- Statistics for the 1st-year Economics and Managements.

Institute Galilée-University Sorbonne Paris Nord   *Villetaneuse, France*
Attaché Temporairement d'Enseigment et de Recherche (ATER)   *Sep. 2019 - Aug. 2020*

Graduate teaching assistant to Probability and Statistics courses:

- Probability and Statistics for 2nd-year of Engineers.
- Probability and Statistics for 2nd-year of Informatics.
- Linear Algebra and Probability for 2nd-year of Physics.
- Statistics for 2nd-year of Mathematics.
- Programming in MATLAB® for studying Statistics.

Institute Galilée-University Sorbonne Paris Nord   *Villetaneuse, France*
Monitor and teaching assistant to Mathematics courses   *Sept 2017 - Sept. 2019*

Graduate teaching assistant to Mathematics courses:
- General Mathematics for pre-college students L0.
- Analysis 1 and 2 for students in Mathematics and Informatics.
- Algebra for students in Mathematics and Informatics.

Research Experience

Teaching assistant and associated researcher   *Université Gustave Eiffel, France*
Attaché Temporairement d'Enseigment et de Recherche (ATER)   *Sept. 2020 - Now*

Associated researcher at the Departement of Mathematics (LAMA):
- Study the topology of sub-graphs explored by the RDS on the configuration models.

LAGA-University Paris 13   *Villetaneuse, France*
PhD student in applied mathematics   *Sept. 2016 - Aug. 2020*

Study the structure of random graphs explored by the *Respondent Driven Sampling (RDS)* method:
- Describe rigorously the random graphs explored by the RDS method on the Erdös-Rényi model.
- Extend the convergence results to the Stochastic Block Model (SBM).
- Study the topology of subgraphs explored by a random walk and develop an estimator for dense SBM-graphon.
- Programming language: R.

Cemracs 2018:   *Luminy, Marseille, France*
Research Project: *Machine learning tools for biological data assimilation.*   *Jul. 2018 - Aug. 2018*
Description: Construction of a Machine Learning tool based on Differential Equations integrated into a dynamic tree allowing biological data assimilation.
- Use a Data-Model Coupling approach to build a biomimetic Statistical Learning tool taking into account some aspects of the biological dynamics of animal body.
- Programming languages: Python, Matlab.

Publications

Journals and Proceedings

[1]   T. P. T. Vo, *Chain referral sampling on Stochastic Block Models.* ESAIM: PS, 24 (2020) 718-738 DOI: https://doi.org/10.1051/ps/2020025.

[2]   V. C. Tran, T. P. T. Vo, *Estimation of dense stochastic block models visited by random walks.* (in revision by EJS). https://hal.archives-ouvertes.fr/hal-02867642/.

Work in Progess

[1]   J.S. Dhersin, V. C. Tran and T. P. T. Vo, *Respondent Driven Sampling on sparse Erdös-Rényi graphs.*

Conferences and Seminars

47th Probility and Statistics Summer school Saint-Flour   *Saint Flour, France*
Attendance and Talk   *02-14 Jul. 2017*
Presentation: "Respondent Driven Sampling (RDS) on Erdös-Rényi graphs."

Franco-Dutch YEP Workshop: Mathematical Statistical Mechanics, Random Graphs and Related Topics.   *Eindhoven, Netherlands*
Attendance   *28 May.- 01 Jun. 2018*

JPS 2018: Workshop for young Probabilists and Statisticians (13th edition)   *Saint Pierre d'Oléron, France*

ATTENDANCE AND TALK   *13-18 Mai. 2018*

Presentation: "Exploration Stochastic Block Models by the chain-referral sampling method."

Seminars of PhD students at the Department of Mathematics, University Lille 1   *Lille, France*

TALK   *12 Jun. 2019*

Presentation: "Respondent-Driven Sampling method and dense graph convergence."

EcoNet Meeting   *Visio conference*

TALK   *26 Nov. 2020*

Presentation: "Exploration of dense graphon via a random walk."