# Trang H. Tran

### ⊠ htt27@cornell.edu · https://htt-trangtran.github.io

(Updated November 1, 2021)

#### FIELDS OF INTEREST

Optimization, and Machine Learning/Deep Learning

### **EDUCATION**

#### 2020 - Present School of Operations Research and Information Engineering, Cornell University

Doctor of Philosophy, Major: Operations Research

PhD advisor: Prof. Katya Scheinberg PhD co-advisor: Dr. Lam M. Nguyen

### 2019 – 2020 Institute of Mathematics, Vietnam Academy of Science and Technology

Graduate Study in Applied Mathematics (Dropped)

### 2015 – 2019 Hanoi National University of Education

Honor Class, Faculty of Mathematics Degree of Bachelor, Classification: Excellent

#### PUBLICATION

### 2021 SMG: A Shuffling Gradient-Based Method with Momentum

Trang H. Tran, Lam M. Nguyen, and Quoc Tran-Dinh International Conference on Machine Learning (ICML 2021) (21.47% acceptance rate)

#### PROFESSIONAL ACTIVITIES

### 2020 - Present Program Committee - Reviewer (peer-reviewed conferences)

International Conference on Machine Learning (ICML 2021, 2020) Conference on Neural Information Processing Systems (NeurIPS 2021) International Conference on Learning Representations (ICLR 2022, 2021)

Conference on Artificial Intelligence (AAAI 2022)

International Conference on Artificial Intelligence and Statistics (AISTATS 2022, 2021)

#### 2021 Reviewer (peer-reviewed journal)

IEEE Transactions on Signal Processing

### 2021 Program Committee – Reviewer (workshops)

Optimization for Machine Learning: Beyond Worst-case Complexity (OPT 2021 - NeurIPS 2021 Workshop)

New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and Data Ownership (NFFL 2021 - NeurIPS 2021 Workshop)

### 2021 Session Chair / Organizer

INFORMS Annual Meeting 2021

"Recent Advances in Stochastic Gradient Algorithms"

### RESEARCH EXPERIENCES

#### AI Research Intern (upcoming)

Summer 2022 IBM Research, Thomas J. Watson Research Center, Yorktown Heights, NY Working under the supervision of Dr. Lam M. Nguyen

#### Research Assistant

#### Fall 2021 Cornell University

Working under the supervision of Prof. Katya Scheinberg

In this project, we analyze the stochastic methods for continuous optimization problems. We investigate some fundamental properties of various probabilistic zeroth-order/first-order oracles and aim to utilize that information to design effective optimization methods.

### HONORS & AWARDS

### 2021 Outstanding Reviewer

International Conference on Learning Representations (ICLR 2021)

Reviewer Award (Top 10%)

#### 2020 ORIE Field Fellowship

Eleanor and Howard Morgan PhD'68 Graduate Fellowship, Fall 2020

### 2019 Young Talent Scholarship Programme 2019

From the Vingroup Innovation Foundation (VINIF) for outstanding students who are pursuing the domestic postgraduate study programmes

### 2016 – 2018 Students Scholarship in National Program

for the Development of Mathematics until 2020

### 2016 First Prize on Algebra

In Vietnam Mathematics Competition for University Students (nationwide award)

#### TALKS

### 10 – 2021 Shuffling Gradient-Based Methods

INFORMS Annual Meeting 2021, Anaheim, CA

### 07 – 2021 SMG: A Shuffling Gradient-Based Method with Momentum

International Conference on Machine Learning (ICML 2021)

### OTHER EXPERIENCES

#### Teaching Assistant

Spring 2021 ORIE 3510 Introduction to Engineering Stochastic Processes,

Cornell University

### SKILLS

Technical Python, MATLAB, PyTorch, TensorFlow, Keras, Gurobi.

Language Vietnamese (native), English (proficient)

### REFERENCES

Katya Scheinberg, Ph.D.

### Professor,

School of Operations Research and Information Engineering, Cornell University

225 Frank H.T. Rhodes Hall, Ithaca, NY 14850, USA

 $\bowtie$  katyas@cornell.edu  $\implies$  +1 (607) 255-1525

https://www.orie.cornell.edu/faculty-directory/katya-scheinberg

## Lam M. Nguyen, Ph.D.

Research Staff Member,

### IBM Research, Thomas J. Watson Research Center

1101 Kitchawan Rd, Yorktown Heights, NY 10598, USA  $\boxtimes$ lamnguyen.mltd@ibm.com $\quad \bigstar +1 \ (469) \ 834-7021$ 

 $\verb|https://researcher.watson.ibm.com/researcher/view.php?person=ibm-lamnguyen.mltd|$ 

Quoc Tran-Dinh, Ph.D.

Associate Professor,

Department of Statistics and Operations Research, The University of North Carolina at Chapel Hill

333 Hanes Hall, Chapel Hill, NC 27599, USA  $\bowtie$  quoctd@email.unc.edu  $\verb""\pi" +1-919-843-6023"$  https://quoctd.web.unc.edu/