Trang H. Tran

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(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 areas: Machine Learning

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.

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School of Operations Research and Information Engineering, Cornell University
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