Lam M. Nguyen

□ LamNguyen.MLTD@gmail.com · https://lamnguyen-mltd.github.io/
 (Updated on 12/05/2021)

EDUCATION

2014 - 2018	Ph.D., Department of Industrial and Systems Engineering, Lehigh University, Bethlehem, PA Thesis advisors: Katya Scheinberg, Martin Takac, and Alexander L. Stolyar
	Thesis title: A Service System with On-Demand Agents, Stochastic Gradient Algorithms and the SARAH Algorithm
	Elizabeth V. Stout Dissertation Award
	Research areas: Optimization for Large Scale Problems, Machine Learning, Deep Learning, Stochastic Models, Optimal Control
2011 - 2013	M.B.A., College of Business, McNeese State University, Lake Charles, LA Beta Gamma Sigma (Academic Honor)
2004 - 2008	B.S. , Applied Mathematics and Computer Science, Faculty of Computational Mathematics and Cybernetics, <i>Lomonosov Moscow State University</i> , Moscow, Russia Thesis advisor: <i>Vladimir I. Dmitriev</i> Thesis title: Methods for Detecting Hidden Period in Some Economics Processes

RESEARCH EXPERIENCE

04/2021 - Present	Research Staff Member, IBM Research, Thomas J. Watson Research Center, Yorktown Heights, NY
	Research areas: Optimization, Machine Learning, Explainable AI
10/2018 - 03/2021	Research Scientist, IBM Research, Thomas J. Watson Research Center, Yorktown Heights, NY
	Research areas: Optimization, Machine Learning, Deep Learning, Reinforcement Learning, AI Solutions, Explainable AI
05/2018 - 08/2018	Research Intern, IBM Research, Thomas J. Watson Research Center, Yorktown Heights, NY
	Research areas: Optimization, Machine Learning, Deep Learning, Reinforcement Learning
08/2017 - 05/2018	Research Co-op, IBM Research, Thomas J. Watson Research Center, Yorktown Heights, NY
	Research areas: Optimization, Machine Learning, Deep Learning
06/2017 - 08/2017	Research Intern, IBM Research, Thomas J. Watson Research Center, Yorktown Heights, NY
	Research areas: Optimization, Machine Learning, Deep Learning
09/2014 - 05/2017	Research Assistant, Lehigh University, Bethlehem, PA
	Research areas: Optimization for Large Scale Problems, Machine Learning, Deep Learning, Stochastic Models, Optimal Control
01/2012 - 12/2013	Graduate (Research) Assistant, McNeese State University, Lake Charles, LA Research areas: Operations Management and Finance

EDITORSHIP / PROGRAM COMMITTEE / ORGANIZING COMMITTEE EDITORSHIP (PEER-REVIEWED JOURNALS)

06/2021 – Present	Action Editor, Machine Learning
01/2022 – Present	Action Editor, Neural Networks
01/2022 – Present	Associate Editor, IEEE Transactions on Neural Networks and Learning Systems

AREA CHAIR / META-REVIEWER/ SENIOR PROGRAM COMMITTEE (PEER-REVIEWED CONFERENCES)

2020 – 2022 Area Chair, International Conference on Machine Learning (ICML)

2021 – 2022 Area Chair, International Conference on Learning Representations (ICLR)

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

2022 Area Chair, Conference on Uncertainty in Artificial Intelligence (UAI)

2022 Senior Program Committee, AAAI Conference on Artificial Intelligence (AAAI)

ORGANIZING COMMITTEE

2021 Chair, New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personaliza-

tion and Data Ownership (NFFL 2021), NeurIPS 2021 Workshop

REVIEWER (PROPOSALS)

2022 Panelist, National Science Foundation (NSF) proposals
 2021 Reviewer, Workshop proposals, NeurIPS 2021 Workshops

GRANT EXPERIENCE

01/2021 - Present IBM PI, "Safety Structures, Certification, and Training for AI in the Feedback Loop",

MIT-IBM Watson AI Lab Exploratory Projects, \$150K. IBM PI: Lam M. Nguyen, Subhro Das, Tsui-Wei Weng

MIT PI: Alexandre Megretski, Luca Daniel

09/2020 - 09/2021 IBM PI, "Hierarchical Disentangled Representations for Scalable Multi-agent Reinforce-

ment Learning", MIT-IBM Watson AI Lab Exploratory Projects, \$100K.

IBM PI: Tsui-Wei Weng, Lam M. Nguyen

MIT PI: Cathy Wu

PUBLICATIONS

[27] Interpretable Clustering via Multi-Polytope Machines.

Connor Lawless, Jayant Kalagnanam, Lam M. Nguyen, Dzung Phan, Chandra Reddy The 36th AAAI Conference on Artificial Intelligence (AAAI 2022), 2022 (15% acceptable).

tance rate)

[26] FedDR - Randomized Douglas-Rachford Splitting Algorithms for Nonconvex Federated

Composite Optimization.

Quoc Tran-Dinh, Nhan Pham, Dzung T. Phan, Lam M. Nguyen

The 35th Conference on Neural Information Processing Systems (NeurIPS 2021), 2021

(26% acceptance rate)

[25] Ensembling Graph Predictions for AMR Parsing.

Thanh Lam Hoang, Gabriele Picco, Yufang Hou, Young-Suk Lee, Lam M. Nguyen,

Dzung T. Phan, Vanessa López, Ramon Fernandez Astudillo

The 35th Conference on Neural Information Processing Systems (NeurIPS 2021), 2021

(26% acceptance rate)

[24] On the Equivalence between Neural Network and Support Vector Machine.

Yilan Chen, Wei Huang, Lam M. Nguyen, Tsui-Wei Weng

The 35th Conference on Neural Information Processing Systems (NeurIPS 2021), 2021

(26% acceptance rate)

[23] A Unified Convergence Analysis for Shuffling-Type Gradient Methods.

Lam M. Nguyen, Quoc Tran-Dinh, Dzung T. Phan, Phuong Ha Nguyen, Marten van

Dijk

Journal of Machine Learning Research (JMLR), volume 22, 1-43, 2021

[22] Ensuring the Quality of Optimization Solutions in Data Generated Optimization Models.

Segev Wasserkrug, Orit Davidovith, Evgeny Shindin, Dharmashankar Subramanian, Parikshit Ram, Pavankumar Murali, Dzung Phan, Nianjun Zhou, Lam M. Nguyen The 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Data

Science Meets Optimisation, DSO@IJCAI2021, 2021

The 38th International Conference on Machine Learning (ICML 2021), PMLR 139, 2021 (21.47% acceptance rate) [20] Regression Optimization for System-level Production Control. Dzung T. Phan, Lam M. Nguyen, Pavankumar Murali, Nhan H. Pham, Hongsheng Liu, Jayant R. Kalagnanam The 2021 American Control Conference (ACC 2021), 2021 [19] Hogwild! over Distributed Local Data Sets with Linearly Increasing Mini-Batch Sizes. Nhuong V. Nguyen, Toan N. Nguyen, Phuong Ha Nguyen, Quoc Tran-Dinh, Lam M. Nguyen, Marten van Dijk The 24th International Conference on Artificial Intelligence and Statistics (AISTATS **2021**), 2021 (29.8% acceptance rate) [18]A Hybrid Stochastic Optimization Framework for Stochastic Composite Nonconvex Optimization. Quoc Tran-Dinh, Nhan H. Pham, Dzung T. Phan, Lam M. Nguyen Mathematical Programming (MAPR), 2021 Hybrid Variance-Reduced SGD Algorithms for Nonconvex-Concave Minimax Problems. [17]Quoc Tran-Dinh, Deyi Liu, Lam M. Nguyen The 34th Conference on Neural Information Processing Systems (NeurIPS 2020), 2020 (20.1% acceptance rate) [16] A Scalable MIP-based Method for Learning Optimal Multivariate Decision Trees. Haoran Zhu, Pavankumar Murali, Dzung T. Phan, Lam M. Nguyen, Jayant R. Kalagnanam The 34th Conference on Neural Information Processing Systems (NeurIPS 2020), 2020 (20.1% acceptance rate) [15]Inexact SARAH Algorithm for Stochastic Optimization. Lam M. Nguyen, Katya Scheinberg, Martin Takac Optimization Methods and Software (GOMS), volume 36(1), 237-258, 2020 [14] Pruning Deep Neural Networks with L0-constrained Optimization. Dzung T. Phan, Lam M. Nguyen, Nam H. Nguyen, Jayant R. Kalagnanam The 20th IEEE International Conference on Data Mining (ICDM 2020), 2020 (19.7% acceptance rate) Stochastic Gauss-Newton Algorithms for Nonconvex Compositional Optimization. [13]Quoc Tran-Dinh, Nhan H. Pham, Lam M. Nguyen The 37th International Conference on Machine Learning (ICML 2020), PMLR 119, 2020 (21.8% acceptance rate) [12]ProxSARAH: An Efficient Algorithmic Framework for Stochastic Composite Nonconvex Optimization. Nhan H. Pham, Lam M. Nguyen, Dzung T. Phan, Quoc Tran-Dinh Journal of Machine Learning Research (JMLR), volume 21(110), 1-48, 2020 IBM 2020 Pat Goldberg Memorial Best Paper Competition - Finalist A Hybrid Stochastic Policy Gradient Algorithm for Reinforcement Learning. [11]Nhan H. Pham, Lam M. Nguyen, Dzung T. Phan, Phuong Ha Nguyen, Marten van Dijk, Quoc Tran-Dinh The 23rd International Conference on Artificial Intelligence and Statistics (AISTATS 2020), PMLR 108, 2020 [10] New Convergence Aspects of Stochastic Gradient Algorithms. Lam M. Nguyen, Phuong Ha Nguyen, Peter Richtarik, Katya Scheinberg, Martin Takac, Marten van Dijk Journal of Machine Learning Research (JMLR), volume 20(176), 1-49, 2019

SMG: A Shuffling Gradient-Based Method with Momentum.

Trang H. Tran, Lam M. Nguyen, Quoc Tran-Dinh

[21]

[9] Tight Dimension Independent Lower Bound on the Expected Convergence Rate for Diminishing Step Sizes in SGD. Phuong Ha Nguyen, Lam M. Nguyen, Marten van Dijk The 33th Conference on Neural Information Processing Systems (NeurIPS 2019), 2019 (21.17% acceptance rate) [8] PROVEN: Verifying Robustness of Neural Networks with a Probabilistic Approach. Tsui-Wei Weng, Pin-Yu Chen*, Lam M. Nguyen*, Mark S. Squillante*, Akhilan Boopathy, Ivan Oseledets, Luca Daniel The 36th International Conference on Machine Learning (ICML 2019), PMLR 97, 2019 (22.5% acceptance rate) [7] Characterization of Convex Objective Functions and Optimal Expected Convergence Rates for SGD. Marten van Dijk, Lam M. Nguyen, Phuong Ha Nguyen, Dzung T. Phan The 36th International Conference on Machine Learning (ICML 2019), PMLR 97, 2019 (22.5% acceptance rate) [6] ChieF: A Change Pattern based Interpretable Failure Analyzer. Dhaval Patel, Lam M. Nguyen, Akshay Rangamani, Shrey Shrivastava, Jayant Kalagnanam 2018 IEEE International Conference on Big Data (IEEE BigData 2018), 2018 [5]SGD and Hogwild! Convergence Without the Bounded Gradients Assumption. Lam M. Nguyen, Phuong Ha Nguyen, Marten van Dijk, Peter Richtarik, Katya Scheinberg, Martin Takac The 35th International Conference on Machine Learning (ICML 2018), PMLR 80, 2018 (25% acceptance rate) IBM Research AI – Selected Publications 2018 [4]SARAH: A Novel Method for Machine Learning Problems Using Stochastic Recursive Gradient. Lam M. Nguyen, Jie Liu, Katya Scheinberg, Martin Takac The 34th International Conference on Machine Learning (ICML 2017), PMLR 70:2613-2621, 2017 (25% acceptance rate) Van Hoesen Family Best Publication Award [3] A Queueing System with On-demand Servers: Local Stability of Fluid Limits. Lam M. Nguyen, Alexander L. Stolyar Queueing Systems (QUESTA), 1-26, Springer, 2017 [2] A Service System with Randomly Behaving On-demand Agents. Lam M. Nguyen, Alexander L. Stolyar The 42nd International Conference on Measurement and Modeling of Computer Sys-44(1):365-366, 2016 (25% acceptance rate)

tems (SIGMETRICS 2016), ACM SIGMETRICS Performance Evaluation Review,

[1] CEO Compensation: Does Financial Crisis Matter?

Prasad Vemala, Lam Nguyen, Dung Nguyen, Alekhya Kommasani

International Business Research, 7(4):125-131, 2014

PREPRINTS

[10] Differential Private Hogwild! over Distributed Local Data Sets.

Marten van Dijk, Nhuong V. Nguyen, Toan N. Nguyen, Lam M. Nguyen, Phuong Ha

Technical report, arXiv preprint, 2021

[9] An Optimal Hybrid Variance-Reduced Algorithm for Stochastic Composite Nonconvex

Optimization.

Deyi Liu, Lam M. Nguyen, Quoc Tran-Dinh

Technical report, arXiv preprint, 2020

[8] Asynchronous Federated Learning with Reduced Number of Rounds and with Differential Privacy from Less Aggregated Gaussian Noise. Marten van Dijk, Nhuong V. Nguyen, Toan N. Nguyen, Lam M. Nguyen, Quoc Tran-Dinh, Phuong Ha Nguyen Technical report, arXiv preprint, 2020 [7]Finite-Time Analysis of Stochastic Gradient Descent under Markov Randomness. Thinh T. Doan, Lam M. Nguyen, Nhan H. Pham, Justin Romberg Technical report, arXiv preprint, 2020 Convergence Rates of Accelerated Markov Gradient Descent with Applications in Rein-[6]forcement Learning. Thinh T. Doan, Lam M. Nguyen, Nhan H. Pham, Justin Romberg Technical report, arXiv preprint, 2020 [5] Buffer Zone based Defense against Adversarial Examples in Image Classification. Kaleel Mahmood*, Phuong Ha Nguyen*, Lam M. Nguyen, Thanh Nguyen, Marten Technical report, arXiv preprint, 2019 Hybrid Stochastic Gradient Descent Algorithms for Stochastic Nonconvex Optimization. [4]Quoc Tran-Dinh, Nhan H. Pham, Dzung T. Phan, Lam M. Nguyen Technical report, arXiv preprint, 2019 [3] Finite-Sum Smooth Optimization with SARAH. Lam M. Nguyen, Marten van Dijk, Dzung T. Phan, Phuong Ha Nguyen, Tsui-Wei Weng, Javant R. Kalagnanam Technical report, arXiv preprint, 2019 [2] When Does Stochastic Gradient Algorithm Work Well? Lam M. Nguyen, Nam H. Nguyen, Dzung T. Phan, Jayant R. Kalagnanam, Katya Scheinberg Technical report, arXiv preprint, 2018 [1] Stochastic Recursive Gradient Algorithm for Nonconvex Optimization Lam M. Nguyen, Jie Liu, Katya Scheinberg, Martin Takac Technical report, arXiv preprint, 2017 GRANTED PATENTS [1] Prediction Optimization for System-level Production Control. Patent 11099529 Dzung T. Phan, Lam M. Nguyen, Pavankumar Murali, Jayant R. Kalagnanam PATENTS APPLICATIONS [11] Outinion America Employetic Control for Long College Indiana Eilele Mennelon

[11]	23. 2021
	Surya Shravan Kumar Sajja, Kanthi Sarpatwar, Lam M. Nguyen , Yuan Yuan Jia, Stephane Michel, Roman Vaculin
[10]	Reasonable Language Model Learning for Text Generation from a Knowledge Graph. Filed on November 02, 2021
	Hoang Thanh Lam, Dzung T. Phan, Gabriele Picco, Lam M. Nguyen , Vanessa Lopez Garcia
[9]	Multi-Polytope Machine for Classification. Filed on September 30, 2021
	Dzung T. Phan, Lam M. Nguyen , Jayant R. Kalagnanam, Chandrasekhara K. Reddy, Srideepika Jayaraman
[8]	Site-Wide Optimization for Mixed Regression Models and Mixed Control Variables. Filed

Dung Tien Phan, Nhan H. Pham, Lam M. Nguyen

on May 25, 2021

[7] A Shuffling-Type Gradient Method for Training Machine Learning models with Big Data. Filed on December 01, 2020 Lam M. Nguyen, Dung Tien Phan [6] Site-wide Operations Management Optimization for Manufacturing and Processing Control. Filed on August 20, 2020 Dung Tien Phan, Lam M. Nguyen, Pavankumar Murali, and Hongsheng Liu [5] System-level Control using Tree-based Regression with Outlier Removal. Filed on August 20, 2020 Dung Tien Phan, Pavankumar Murali, Lam M. Nguyen [4]A Method for Tuning Hyper-Parameters for Classification. Filed on July 27, 2020 Dung Tien Phan, Hongsheng Liu, Lam M. Nguyen [3] A Method and System for Automated Generation of Optimization Model for System-Wide Plant Optimization. Filed on July 24, 2020 Dung Tien Phan, Lam M. Nguyen, Pavankumar Murali, Nianjun Zhou [2] Optimal Interpretable Decision Trees using Integer Linear Programming Techniques. Filed on February 20, 2020 Pavankumar Murali, Haoran Zhu, Dung Tien Phan, Lam M. Nguyen [1] Compression of Deep Neural Networks. Filed on March 13, 2019. US Patent Application 20200293876 Dzung T. Phan, Lam M. Nguyen, Nam H. Nguyen, Jayant R. Kalagnanam

THESES

A Service System with On-Demand Agents, Stochastic Gradient Algorithms and the

SARAH Algorithm.

Lam M. Nguyen

PhD dissertation, Lehigh University, Bethlehem, PA

Elizabeth V. Stout Dissertation Award

2008 Methods for Detecting Hidden Period in Some Economics Processes.

Lam M. Nguyen

Undergraduate thesis, Lomonosov Moscow State University, Moscow, Russia

WORKSHOPS

[1] New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and

Data Ownership.

Nghia Hoang, **Lam M. Nguyen**, Pin-Yu Chen, Tsui-Wei Weng, Sara Magliacane, Bryan

Kian Hsiang Low, Anoop Deoras

Workshop at The 35th Conference on Neural Information Processing Systems (NeurIPS

2021), 2021

INVITED TALKS

10/2021 Hogwild! Over Distributed Local Data Sets With Linearly Increasing Mini-batch Sizes.

INFORMS Annual Meeting, Anaheim, CA

11/2020 A Unified Convergence Analysis for Shuffling-Type Gradient Methods.

 $INFORMS\ Annual\ Meeting,\ Virtual\ Conference$

10/2019 Finite-Sum Smooth Optimization with SARAH.

INFORMS Annual Meeting, Seattle, WA

11/2018 Inexact SARAH for Solving Stochastic Optimization Problems.

INFORMS Annual Meeting, Phoenix, AZ

08/2018 Inexact SARAH for Solving Stochastic Optimization Problems.

DIMACS/TRIPODS/MOPTA, Bethlehem, PA

03/2018 When does stochastic gradient algorithm work well?

INFORMS Optimization Society Conference, Denver, CO

10/2017	SARAH: Stochastic Recursive Gradient Algorithm. INFORMS Annual Meeting, Houston, TX
08/2017	SARAH Algorithm.
	IBM Thomas J. Watson Research Center, Yorktown Heights, NY
11/2016	A Queueing System with On-demand Servers: Local Stability of Fluid Limits

INFORMS Annual Meeting, Nashville, TN

08/2016 A Queueing System with On-demand Servers: Local Stability of Fluid Limits.

Modeling and Optimization: Theory and Applications, Bethlehem, PA

PROFESSIONAL ACTIVITIES

2021

PROFESSIONAL ACTIVITIES			
	MEMBER		
06/2020 – Present	Editorial Board, Journal of Machine Learning Research		
06/2021 – Present	Editorial Board, Machine Learning		
01/2022 – Present	Editorial Board, Neural Networks		
01/2022 – Present	Editorial Board, IEEE Transactions on Neural Networks and Learning Systems		
12/2021 – Present	Reviewer, National Science Foundation (NSF)		
2021	Program Committee , "New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and Data Ownership (NFFL 2021)", NeurIPS 2021 Workshop		
2020	Program Committee , "Optimization for Machine Learning (OPT 2020)", NeurIPS 2020 Workshop		
2018	Program Committee , "Modern Trends in Nonconvex Optimization for Machine Learning", ICML 2018 Workshop		
	REVIEWER / PROGRAM COMMITTEE (PEER-REVIEWED CONFERENCES)		
2017 - 2019	International Conference on Machine Learning (ICML)		
2017 - 2021	Conference on Neural Information Processing Systems (NIPS/NeurIPS)		
2018 - 2020	International Conference on Learning Representations (ICLR)		
2019 - 2020	International Conference on Artificial Intelligence and Statistics (AISTATS)		
2021 - 2022	Conference on Learning Theory (COLT)		
2019 - 2021	AAAI Conference on Artificial Intelligence (AAAI)		
2020	International Joint Conferences on Artificial Intelligence (IJCAI)		
2019 - 2022	IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)		
2019 - 2021	IEEE International Conference on Computer Vision (ICCV)		
2020	European Conference on Computer Vision (ECCV)		
2019 - 2021	Conference on Uncertainty in Artificial Intelligence (UAI)		
	REVIEWER (PEER-REVIEWED JOURNALS)		
2018 - 2022	Journal of Machine Learning Research		
2020 - 2021	Mathematical Programming		
2020 - 2021	SIAM Journal on Optimization		
2021	SIAM Journal on Numerical Analysis		
2020 - 2021	IEEE Transactions on Neural Networks and Learning Systems		
2019 - 2020	IEEE Transactions on Signal Processing		
2019	Artificial Intelligence		
2018	Optimization Methods and Software		
2020	SIAM Journal on Mathematics of Data Science		
	SESSION CHAIR / ORGANIZER (CONFERENCES)		

International Conference on Machine Learning (ICML)

- Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)"

	international Comerence on Learning Representations (ICLR)
2021	- Session "Oral Session 6"
	International Conference on Artificial Intelligence and Statistics (AISTATS)
2021	- Session "Theory and Practice of Machine Learning"
	INFORMS Annual Meeting
2021	- Session "Recent Advances in Stochastic Gradient Algorithms"
2020	- Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning"
2019	- Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning"
2018	- Session "Recent Advances in Optimization Methods for Machine Learning"
	DIMACS/TRIPODS/MOPTA
2018	- Sessions "Sparse Optimization" and "Stochastic Gradient Descent"
	IBM ACTIVITIES
2021 – Present	Champion, Professional Interest Community (PIC) - Learning
2020	Reviewer, IBM Ph.D. Fellowships
	SOCIETY MEMBERSHIPS
2016 – Present	Society for Industrial and Applied Mathematics (SIAM)
2014 – Present	The Institute for Operations Research and the Management Sciences (INFORMS)
2014 – Present	Beta Gamma Sigma (The International Business Honor Society)
MENTORSHIE	
06/2021 - Present	Quang M. Nguyen , Ph.D. student, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology.
06/2021 – Present	Hoang H. Nguyen , Ph.D. student, H. Milton Stewart School of Industrial and Systems Engineering, <i>Georgia Institute of Technology</i> .
05/2021 - 08/2021	Nathanael Assefa, Ph.D. student, Department of Computer Science, <i>University of Illinois Urbana-Champaign</i> (IBM Research Intern).
05/2021 - 08/2021	Connor Lawless, Ph.D. student, School of Operations Research and Information Engineering, Cornell University (IBM Research Intern).
05/2021 - 08/2021	Huozhi Zhou , Ph.D. student, Department of Electrical and Computer Engineering, University of Illinois Urbana-Champaign (IBM Research Intern).
03/2021 – Present	Wang Zhang, Ph.D. student, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology (student of Prof. Luca Daniel).
03/2021 – Present	Yilan Chen, M.S. student, Department of Computer Science and Engineering Department, University of California San Diego (student of Prof. Tsui-Wei Weng).
09/2020 - 09/2021	Vindula Jayawardana, Ph.D. student, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology (student of Prof. Cathy Wu).
06/2020 - 09/2020	Michael Huang, Ph.D. student, Department of Data Science and Operations, Marshall School of Business, <i>University of Southern California</i> (IBM Research Intern).
10/2019 – Present	Trang H. Tran , Ph.D. student, School of Operations Research and Information Engineering, <i>Cornell University</i> (student of Prof. Katya Scheinberg) (IBM Research Intern).
05/2019 - 12/2019	Hongsheng Liu, Ph.D. student, Department of Statistics and Operations Research, University of North Carolina at Chapel Hill (IBM Research Intern). Now at Huawei Technologies Co., Ltd., China.
01/2019 - 08/2019	Haoran Zhu , Ph.D. student, Department of Industrial and Systems Engineering, <i>University of Wisconsin – Madison</i> (IBM Research Intern).
01/2019 - 06/2020	Toan N. Nguyen, Ph.D. student, Department of Computer Science and Engineering, University of Connecticut (student of Prof. Marten van Dijk).

International Conference on Learning Representations (ICLR) $\,$

- 01/2019 11/2021 Nhuong V. Nguyen, Ph.D. student, Department of Computer Science and Engineering, University of Connecticut (student of Prof. Marten van Dijk).
- 08/2018 12/2021 Nhan H. Pham, Ph.D. student, Department of Statistics and Operations Research,

University of North Carolina at Chapel Hill (student of Prof. Quoc Tran-Dinh) (IBM

Research Intern). Now at IBM Research, USA.

PH.D. COMMITTEE MEMBERSHIP

- 10/2021 Present **Trang H. Tran**, Ph.D. student, School of Operations Research and Information Engineering, Cornell University (student of Prof. Katya Scheinberg).
- 09/2020 Present **Deyi Liu**, Ph.D. student, Department of Statistics and Operations Research, *University* of North Carolina at Chapel Hill (student of Prof. Quoc Tran-Dinh).

OTHER WORK EXPERIENCE

09/2014 - 05/2	015 Teaching	Assistant	Lehiah	University	Bethlehem, PA
00/2011 00/2	oro reacining	TIBBIBUCIIU,	Delivering	C TOUCCI GUUY,	Doumonom, 111

Courses: Engineering Probability (ISE 111), Applied Engineering Statistics (ISE 121)

05/2013 - 08/2013 Graduate Assistant (Web Developer), College of Business, McNeese State Univer-

sity, Lake Charles, LA

01/2012 - 12/2013 Graduate (Teaching) Assistant, McNeese State University, Lake Charles, LA

Courses: Human Resource Management (MGMT 310), Staffing (MGMT 315), Strategic Management (MGMT 481), Management Theory and Organizational Behavior (MGMT 604), Issues in Global Business (BADM 218), Entrepreneurial Finance for Small Business

(FIN 308)

09/2008 - 08/2009 Software Engineer, FPT Software Company, Ho Chi Minh City, Vietnam

09/2007 - 05/2008 Teaching Assistant, Lomonosov Moscow State University, Moscow, Russia

Courses: Mathematical Analysis (Calculus), Linear Algebra and Analytic Geometry

HONORS & AWARDS

2014

2021	IBM Research Accomplishment on "Stochastic Gradient Methods: Theory and Applica-
	tions"
2021	3rd IBM Invention Plateau
2020	IBM Outstanding Technical Achievement Award
2019	$\textbf{IBM Reseach Accomplishment on "} SROM: Smarter \ Resource \ \mathscr{COP} Perations \ Management"$
2019	NeurIPS 2019 Top Reviewers
2019	Elizabeth V. Stout Dissertation Award, Lehigh University, Bethlehem, PA
2018	Van Hoesen Family Best Publication Award, Lehigh University, Bethlehem, PA
2016 - 2017	Dean's Doctoral Fellowship (RCEAS), Lehigh University, Bethlehem, PA
2014 - 2015	Dean's Doctoral Assistantship, Lehigh University, Bethlehem, PA

Beta Gamma Sigma (Academic Honor Society)