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, Lomonosov Moscow State University, Moscow, Russia Thesis advisor: Vladimir I. Dmitriev 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

GRANT EXPERIENCE

09/2020 - 09/2021	IBM Co-PI, "Hierarchical Disentangled Representations for Scalable Multi-agent Rein-
	forcement Learning", MIT-IBM Watson AI Lab Exploratory Projects, \$100K, (MIT PI:
	Cathy Wu, IBM PI: Tsui-Wei (Lily) Weng)

PUBLICATIONS

[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
[21]	SMG: A Shuffling Gradient-Based Method with Momentum.
	Trang H. Tran, Lam M. Nguyen, Quoc Tran-Dinh 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
[17]	Hybrid Variance-Reduced SGD Algorithms for Nonconvex-Concave Minimax Problems. 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
[4 2]	(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)
[13]	Stochastic Gauss-Newton Algorithms for Nonconvex Compositional Optimization. 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
[11]	A Hybrid Stochastic Policy Gradient Algorithm for Reinforcement Learning. Nhan H. Pham, Lam M. Nguyen , Dzung T. Phan, Phuong Ha Nguyen, Marten van Dijk, Quoc Tran-Dinh JThe 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 [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 2018 IEEE International Conference on Big Data (IEEE BigData 2018), 2018 SGD and Hogwild! Convergence Without the Bounded Gradients Assumption. [5] 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 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 Systems (SIGMETRICS 2016), ACM SIGMETRICS Performance Evaluation Review, 44(1):365-366, 2016 (25% acceptance rate)

[1] CEO Compensation: Does Financial Crisis Matter?

Prasad Vemala, **Lam Nguyen**, Dung Nguyen, Alekhya Kommasani *International Business Research*, 7(4):125-131, 2014

PREPRINTS

[12] Federated Learning with Randomized Douglas-Rachford Splitting Methods.

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

Technical report, arXiv preprint, 2021

[11]Differential Private Hogwild! over Distributed Local Data Sets. Marten van Dijk, Nhuong V. Nguyen, Toan N. Nguyen, Lam M. Nguyen, Phuong Ha Nguyen Technical report, arXiv preprint, 2021 [10] An Optimal Hybrid Variance-Reduced Algorithm for Stochastic Composite Nonconvex Optimization. Deyi Liu, Lam M. Nguyen, Quoc Tran-Dinh Technical report, arXiv preprint, 2020 Asynchronous Federated Learning with Reduced Number of Rounds and with Differential [9] 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 Finite-Time Analysis of Stochastic Gradient Descent under Markov Randomness. [8] Thinh T. Doan, Lam M. Nguyen, Nhan H. Pham, Justin Romberg Technical report, arXiv preprint, 2020 [7] A Unified Convergence Analysis for Shuffling-Type Gradient Methods. Lam M. Nguyen, Quoc Tran-Dinh, Dzung T. Phan, Phuong Ha Nguyen, Marten van Dijk Technical report, arXiv preprint, 2020 [6] Convergence Rates of Accelerated Markov Gradient Descent with Applications in Reinforcement 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 [4]Hybrid Stochastic Gradient Descent Algorithms for Stochastic Nonconvex Optimization. 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, Jayant 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 PATENTS APPLICATIONS

[16] A Method and System for Kernel Multi-Polytope Machine for Classification. (Pending).

To be filed
Dzung T. Phan, Lam M. Nguyen, Jayant R. Kalagnanam, Chandrasekhara K. Reddy,
Srideepika Jayaraman

[15] Method and System of Layer and Component Oriented Optimization Flexible and
Pluggable Architecture for Asset Management Platform. (Pending). To be filed
Nianjun Zhou, Pavankumar Murali, Dzung T. Phan, Lam M. Nguyen

[14]System and Method for unsupervised Learning of Semantic Graph from textual data and language generation from Semantic grapH via Reinforcement learning. (Pending). To be filed Hoang Thanh Lam, Dzung T. Phan, Gabriele Picco, Lam Minh Nguyen, Marco Luca Sbodio, Vanessa Lopez Garcia [13] Method, Apparatus, and System of Dynamic Asset Management Optimization with Integration of Asset Failure and Asset Health Prediction Change. (Pending). To be filed Nianjun Zhou, Dzung T. Phan, Pavankumar Murali, Lam M. Nguyen [12]An End-to-End Model for Training Decision Trees with Dimension Reduction. (Pending). To be filed Dzung T. Phan, Michael Huang, Pavankumar Murali, Lam M. Nguyen [11] Method for Reasonable Matching Learning. (Pending). To be filed Hoang Thanh Lam, Dzung T. Phan, Gabriele Picco, Lam M. Nguyen, Vanessa Lopez Garcia A Method and System for Performing Distributed Training of Large-Scale Deep Neural [10] Networks and Machine Learning Models. (Pending). To be filed Lam M. Nguyen, Dung Tien Phan, Jayant R. Kalagnanam [9] Site-Wide Optimization for Mixed Regression Models and Mixed Control Variables. Filed on May 25, 2021 Dung Tien Phan, Nhan H. Pham, Lam M. Nguyen [8] A Shuffling-Type Gradient Method for Training Machine Learning models with Big Data. Filed on December 01, 2020 Lam M. Nguyen, Dung Tien Phan [7] 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 [6] System-level Control using Tree-based Regression with Outlier Removal. Filed on August 20, 2020 Dung Tien Phan, Pavankumar Murali, Lam M. Nguyen [5] A Method for Tuning Hyper-Parameters for Classification. Filed on July 27, 2020 Dung Tien Phan, Hongsheng Liu, Lam M. Nguyen A Method and System for Automated Generation of Optimization Model for System-Wide [4]Plant Optimization. Filed on July 24, 2020 Dung Tien Phan, Lam M. Nguyen, Pavankumar Murali, Nianjun Zhou [3] System and Method for Quality Mode Prediction in Manufacturing and Process Industries. Filed on February 20, 2020 Pavankumar Murali, Haoran Zhu, Dung Tien Phan, Lam M. Nguyen [2] Prediction Optimization for System-level Production Control. Filed on July 23, 2019 Dzung T. Phan, Lam M. Nguyen, Pavankumar Murali, Jayant R. Kalagnanam [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** 2018

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] Closing the Gap between Academia and Industry in Federated Learning: Challenges on

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

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

PROFESSIONAL ACTIVITIES	
	EDITORSHIP (PEER-REVIEWED JOURNALS)
2021 - Present	Action Editor, Machine Learning
	AREA CHAIR / META-REVIEWER/ SENIOR PROGRAM COMMITTEE (PEER-REVIEWED CONFERENCES)
2020 - 2021	Area Chair, International Conference on Machine Learning (ICML)
2021 - 2022	Area Chair, International Conference on Learning Representations (ICLR)
2021 - 2022	${\bf Area\ Chair}, \ {\bf International\ Conference\ on\ Artificial\ Intelligence\ and\ Statistics\ (AISTATS)}$
2022	Senior Program Committee, AAAI Conference on Artificial Intelligence (AAAI)
	REVIEWER / PROGRAM COMMITTEE (PEER-REVIEWED CONFERENCES)
2017 - 2019	
2017 - 2019 2017 - 2021	ENCES)
	ENCES) International Conference on Machine Learning (ICML)
2017 - 2021	ENCES) International Conference on Machine Learning (ICML) Conference on Neural Information Processing Systems (NIPS/NeurIPS)
2017 - 2021 $2018 - 2020$	ENCES) International Conference on Machine Learning (ICML) Conference on Neural Information Processing Systems (NIPS/NeurIPS) International Conference on Learning Representations (ICLR)
2017 - 2021 $2018 - 2020$ $2019 - 2020$	ENCES) International Conference on Machine Learning (ICML) Conference on Neural Information Processing Systems (NIPS/NeurIPS) International Conference on Learning Representations (ICLR) International Conference on Artificial Intelligence and Statistics (AISTATS)

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2019 - 2021	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 - 2021	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
	REVIEWER (PROPOSALS)
2021	Workshop proposals, NeurIPS 2021 Workshops
	MEMBER
2021 - Present	Editorial Board, Machine Learning
2020 - Present	Editorial Board, Journal of Machine Learning Research
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 Learn-
2010	
2010	ing", ICML 2018 Workshop
2010	ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES)
	ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML)
2021	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)"
2021	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR)
	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) Session "Oral Session 6"
2021	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS)
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2021 2021 2021	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting
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2021 2021 2021 2021 2020	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting Session "Recent Advances in Stochastic Gradient Algorithms" Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning"
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2021 2021 2021 2021 2020 2019	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting Session "Recent Advances in Stochastic Gradient Algorithms" Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning" Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning" Session "Recent Advances in Optimization Methods for Machine Learning" DIMACS/TRIPODS/MOPTA
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2021 2021 2021 2021 2020 2019 2018	ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) - Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) - Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) - Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting - Session "Recent Advances in Stochastic Gradient Algorithms" - Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning" - Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning" - Session "Recent Advances in Optimization Methods for Machine Learning" DIMACS/TRIPODS/MOPTA - Sessions "Sparse Optimization" and "Stochastic Gradient Descent" ORGANIZER (WORKSHOPS)
2021 2021 2021 2021 2020 2019 2018	 ing", ICML 2018 Workshop SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting Session "Recent Advances in Stochastic Gradient Algorithms" Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning" Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning" Session "Recent Advances in Optimization Methods for Machine Learning" DIMACS/TRIPODS/MOPTA Sessions "Sparse Optimization" and "Stochastic Gradient Descent" ORGANIZER (WORKSHOPS) Conference on Neural Information Processing Systems (NeurIPS) Workshop "New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Per-
2021 2021 2021 2021 2020 2019 2018	SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) - Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) - Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) - Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting - Session "Recent Advances in Stochastic Gradient Algorithms" - Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning" - Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning" - Session "Recent Advances in Optimization Methods for Machine Learning" DIMACS/TRIPODS/MOPTA - Sessions "Sparse Optimization" and "Stochastic Gradient Descent" ORGANIZER (WORKSHOPS) Conference on Neural Information Processing Systems (NeurIPS) - Workshop "New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and Data Ownership" (NFFL 2021)
2021 2021 2021 2021 2020 2019 2018 2018	SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) - Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) - Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) - Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting - Session "Recent Advances in Stochastic Gradient Algorithms" - Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning" - Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning" - Session "Recent Advances in Optimization Methods for Machine Learning" DIMACS/TRIPODS/MOPTA - Sessions "Sparse Optimization" and "Stochastic Gradient Descent" ORGANIZER (WORKSHOPS) Conference on Neural Information Processing Systems (NeurIPS) - Workshop "New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and Data Ownership" (NFFL 2021) IBM ACTIVITIES
2021 2021 2021 2021 2020 2019 2018	SESSION CHAIR / ORGANIZER (CONFERENCES) International Conference on Machine Learning (ICML) - Sessions "Optimization (Stochastic)" and "Optimization (Nonconvex)" International Conference on Learning Representations (ICLR) - Session "Oral Session 6" International Conference on Artificial Intelligence and Statistics (AISTATS) - Session "Theory and Practice of Machine Learning" INFORMS Annual Meeting - Session "Recent Advances in Stochastic Gradient Algorithms" - Session "Recent Advances in Stochastic Gradient Algorithms for Machine Learning" - Session "Fast and Provable Nonconvex Optimization Algorithms in Machine Learning" - Session "Recent Advances in Optimization Methods for Machine Learning" DIMACS/TRIPODS/MOPTA - Sessions "Sparse Optimization" and "Stochastic Gradient Descent" ORGANIZER (WORKSHOPS) Conference on Neural Information Processing Systems (NeurIPS) - Workshop "New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and Data Ownership" (NFFL 2021)

SOCIETY MEMBERSHIPS

2016 – Present	Society fo	r Industrial	and Applied	Mathematics ((SIAM)
2010 11000110	DOCICU, IO	1 IIIaabulaa	and rippined	TYLOUTICITIOUTCD ((() 11 11 1

2014 - Present The Institute for Operations Research and the Management Sciences (INFORMS)

2014 - Present Beta Gamma Sigma (The International Business Honor Society)

MENTORSHIP

06/2021 - Present	Quang M. Nguyen, Ph.D. student, Department of Electrical Engineering and Computer
	Science, Massachusetts Institute of Technology.

06/2021 - PresentHoang Nguyen, Ph.D. student, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology.

05/2021 - PresentNathanael Assefa, Ph.D. student, Department of Computer Science, University of Illinois Urbana-Champaign (IBM Research Intern).

05/2021 - Present Connor Lawless, Ph.D. student, School of Operations Research and Information Engineering, Cornell University (IBM Research Intern).

05/2021 - PresentHuozhi Zhou, Ph.D. student, Department of Electrical and Computer Engineering, University of Illinois Urbana-Champaign (IBM Research Intern).

09/2020 - PresentVindula Jayawardana, Ph.D. student, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology (student of Prof. Cathy Wu).

06/2020 - 09/2020Michael Huang, Ph.D. student, Department of Data Science and Operations, Marshall School of Business, University of Southern California (IBM Research Intern).

10/2019 - Present Trang H. Tran, Ph.D. student, School of Operations Research and Information Engineering, Cornell University (student of Prof. Katya Scheinberg).

05/2019 - 12/2019Hongsheng 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 - 08/2019Haoran Zhu, Ph.D. student, Department of Industrial and Systems Engineering, University of Wisconsin - Madison (IBM Research Intern).

01/2019 - 06/2020Toan N. Nguyen, Ph.D. student, Department of Computer Science and Engineering, University of Connecticut (student of Prof. Marten van Dijk).

01/2019 - PresentNhuong V. Nguyen, Ph.D. student, Department of Computer Science and Engineering, University of Connecticut (student of Prof. Marten van Dijk).

08/2018 - Present 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).

PH.D. COMMITTEE MEMBERSHIP

09/2020 - PresentDeyi 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 - 05/2015	Teaching Assistant, Lehigh University, Bethlehem, PA Courses: Engineering Probability (ISE 111), Applied Engineering Statistics (ISE 121)
05/2013 - 08/2013	Graduate Assistant (Web Developer), College of Business, McNeese State University, 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 - 08/2009Software Engineer, FPT Software Company, Ho Chi Minh City, Vietnam $09/2007 - 05/2008 \hspace{0.5cm} \textbf{Teaching Assistant}, \ \textit{Lomonosov Moscow State University}, \ \textit{Moscow}, \ \textit{Russia}$

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

HONORS & AWARDS

2019	IBM Outstanding Technical Achievement Award
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
2014	Beta Gamma Sigma (Academic Honor Society)
2011 - 2013	Dore Graduate Stipends, McNeese State University, Lake Charles, LA