MINH H. PHAM

https://minhhpham.github.io

QUALIFICATION SUMMARY

- Ph.D. Candidate in Computer Science, Master's Degree in Statistics (2018)
- Winner of the 2021 IEEE Big Data Cup Challenge in Reinforcement Learning
- 2 years of working experience as system administrator for a high-performance computing cluster
- Ph.D. concentration in parallel processing and GPGPU

EDUCATION

University of South Florida, Tampa, FL 5/2024
- Ph.D. in Computer Science (GPA 4.0)

University of South Florida, Tampa, FL 5/2018
- Master of Arts in Statistics (GPA 3.97)
- Thesis: Signal Detection of Adverse Drug Reaction using the Adverse Event Reporting System: Literature Review and Novel Methods

University of South Florida, Tampa, FL 5/2016
- Bachelor of Arts in Statistics (GPA 3.97, USF Dean's List, Honor College, and Summa Cum Laude)

WORKING EXPERIENCE

Graduate Research Assistant, University of South Florida– Tampa, FL 8/2019 – Now
- System administrator for a high-performance computing cluster
- Develop web servers (back-end and front-end)

Research Assistant, Center for Urban Transportation Research – Tampa, FL 5/2018 – 5/2019
- Archive real-time transit data using Python and MongoDB on Linux cloud computing
- Predict arrival time with machine learning

Actuarial Intern, Metlife – Bridgewater, NJ 5/2016 – 12/2016

Actuarial Intern, Metlife – Morristown, NJ 5/2016 – 12/2016

SOFTWARE

Credit Card Approval Chance	https://minhhpham.github.io/credit-cards
Wastewater Management Web Application	https://wastewater.csee.usf.edu/
Pharmacovigilance Algorithms	https://github.com/minhhpham/MultiPharma
NGS short-read aligner implementation on CUDA	https://github.com/minhhpham/bwa

PUBLICATIONS

In Progress

Pham M, Li H, Mou C, Ramachandran K, Tu Y. Design and Implementation of A Buffer Manager for Massively Parallel Systems.

Journal Articles

Morris R, Luboff H, Jose RP, Eckhoff K, Bu K, **Pham M**, Rohlsen-Neal D, Cheng F. Bradycardia Due to Donepezil in Adults: Systematic Analysis of FDA Adverse Event Reporting System. *Journal of Alzheimer's Disease*. 2021 Mar 23:1-1.

Oberstaller J, Adapa SR, Dayhoff II GW, Gibbons J, Keller TE, Li C, Lim J, **Pham M**, Sarkar A, Sharma R,

Wani AH. Uncovering host-microbiome interactions in global systems with collaborative programming: a novel approach integrating social and data sciences. *F1000Research*. 2020 Dec 17;9(1478):1478.

Pham, Minh, and Kaiqi Xiong. "A survey on security attacks and defense techniques for connected and autonomous vehicles." *arXiv preprint* arXiv:2007.08041 (2020).

Barbeau, Sean J., **Minh Pham**, Jorge Adorno Nieves, and Robert L. Bertini. "Improving Transportation Performance Measurement via Open" Big Data" Systems–Phase 1 Transit." (2020).

Ferreira, G.C., Oberstaller, J., Fonseca, R., Keller, T.E., Adapa, S.R., Gibbons, J., Wang, C., Liu, X., Li, C., **Pham, M**. and Dayhoff II, G.W., 2019. Iron Hack-A symposium/hackathon focused on porphyrias, Friedreich's ataxia, and other rare iron-related diseases. *F1000Research*, 8.

M. Pham, F. Cheng, and K. Ramachandran, "A Comparison Study of Algorithms to Detect Drug–Adverse Event Associations: Frequentist, Bayesian, and Machine-Learning Approaches," *Drug Safety*, vol. 42, no. 6, pp. 743–750, 2019.

Y. Hao, X. Yuan, J. Yan, **M. Pham**, D. Rohlsen, P. Qian, F. Cheng, and Y. Wang, "Metabolomic Markers in Tongue-Coating Samples from Damp Phlegm Pattern Patients of Coronary Heart Disease and Chronic Renal Failure," *Disease Markers*, 2019.

Z. Tang, **M. Pham**, Y. Hao, F. Wang, D. Patel, L. Jean-Baptiste, L. Fan, W. Wang, Y. Wang, and F. Cheng, "Sex, Age, and BMI Modulate the Association of Physical Examinations and Blood Biochemistry Parameters and NAFLD: A Retrospective Study on 1994 Cases Observed at Shuguang Hospital, China," *BioMed Research International*, 2019.

A. B. Lester, P. L. Winters, and **M. Pham**, "Segment: Applicability of an Existing Segmentation Technique to Transportation Demand Management Campaigns in the United States," *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2673, no. 9, pp. 227–239, 2019.

Y. Hao, F. Cheng, **M. Pham**, H. Rein, D. Patel, Y. Fang, Y. Feng, J. Yan, X. Song, H. Yan, and Y. Wang, "A Noninvasive, Economical, and Instant-Result Method to Diagnose and Monitor Type 2 Diabetes Using Pulse Wave: Case-Control Study," *JMIR mHealth and uHealth*, vol. 7, no. 4, 2019.

Y. Lu, A. Ramachandra, **M. Pham**, Y.-C. Tu, and F. Cheng, "CuDDI: A CUDA-Based Application for Extracting Drug-Drug Interaction Related Substance Terms from PubMed Literature," *Molecules*, vol. 24, no. 6, p. 1081, 2019.

M. H. Pham, C. Tsokos, and B.-J. Choi, "Maximum Likelihood Estimation for the Generalized Pareto Distribution and Goodness-of-Fit Test with Censored Data," *Journal of Modern Applied Statistical Methods*, vol. 17, no. 2, 2019.

M. H. Pham and R. C. Kafle, "Competing Risks Analysis of African American Breast Cancer Patients," *Advances in Breast Cancer Research*, vol. 06, no. 01, pp. 28–41, 2017.

Conference Proceedings

J. Adorno Nieves, **M. Pham,** S. Barbeau, A. Labrador (2019). Scalable Real-Time Transit Data Archiving: A Framework for Performance Assessment and Machine Learning Prediction. In *Transportation Research Board Conference Proceedings* (No. 55)

M. Pham, J. Lin, and Y. Zhang, "Diagnosing Voice Disorder with Machine Learning," In *IEEE International Conference on Big Data*, 2018.

Thesis

M. H. Pham. (2018). *Signal Detection of Adverse Drug Reaction using the Adverse Event Reporting System: Literature Review and Novel Methods* (Master Thesis, University of South Florida).

INVITED REVIEWER FOR:

- IEEE Transactions on Intelligent Transportation Systems
- Scientific Reports by Nature
- Clinical Drug Investigation by Springer

PROGRAMMING SKILLS

- C/C++, CUDA: for all research projects
- Python: for all machine learning/data mining projects

AWARDS & HONORS

- 2021 IEEE Big Data Cup Challenge: 1st place out of 22 teams 11/2018
- Travel award of $1000 from The Center for Transportation, Equity, Decisions and Dollars 12/2018
- 2018 IEEE Big Data Cup Challenge: 8th place out of 109 teams from 27 countries 11/2018
- Southeastern Actuaries Conference (SEAC) Scholarship 8/2017
- Network-centric Stochastic Hybrid Dynamic Time-event Process Modeling Scholarship 5/2016

LEADERSHIPS & ACTIVITIES

- **Web Chair**, IEEE International Conference on Data Mining 2021
- **Web Chair**, International Conference on Scientific and Statistical Database Management 2021
- **President**, Actuarial Society at USF 12/2014 – 5/2016