MINH H. PHAM

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https://minhhpham.github.io

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)
- Thesis: Stochastic Dynamic Modeling of Unemployment-Inflation Processes: State, Parameter and Forecasting

WORKING EXPERIENCE

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

Research Associate, 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

Graduate Assistant, Statistics Coordinator - USF Academic Success Center – Tampa, FL 12/ 2016 – 5/2018
- Setup and maintained the department's database from unstructured and diverse data sources
- Maintained and improved the department's automatic programs using Python

Actuarial Intern – Group, Voluntary & Worksite Benefit
Metlife – Bridgewater, NJ 5/2016 – 12/2016
- Projected cash and values of business with statistical models
- Automated a project using SQL, reduced calculation time from hours to 5 minutes
- Modeled sales opportunities in the market by analyzing big databases

Actuarial Intern - Market Risk & Derivative Strategies
Metlife – Morristown, NJ 5/2015 – 8/2015
- Used statistical models to simulate the financial market to test the corporation's endurance against global shocks
- Main developer of a new automatic program using R and SQL
- Documented the automatic process for cross-departmental use

PUBLICATIONS

Journal Articles

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. 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.

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:

- Scientific Reports (Nature publication company)
- Springer Nature

PRESENTATIONS

- **Transportation Research Board 98th Annual Meeting (Conference)** 1/2019
  Title: "Scalable Real-Time Transit Data Archiving: A Framework for Performance Assessment and Machine Learning Prediction"
- **Transportation Research Board 98th Annual Meeting (Conference)** 1/2019

Title: “SEGMENT: Applicability of an Existing Segmentation Technique to Transportation Demand Management (TDM) Campaigns In The United States”

- **Frontiers of Statistics, Tampa, Florida (Conference)** 5/2018
  Title: “Literature Review and Novel Methods in Drug - Adverse Event Association Study”
  Archive: https://minhhpham.github.io/presentations/frontiers-of-stats2018.html
- **Tampa R Users Group (Meetup)** 6/2018
  Title: “Machine Learning in R”
  Archive: https://github.com/TampaUseRs/TampaUseRs/tree/master/meetups/20180619-machine-learning

COMPUTER SKILLS

I am very familiar with the followings.

Programming

- Python, R: performed most projects and research with R and Python, gave a presentation about machine learning with R
- C/C++, CUDA: trained by the Ph.D. program

Database Management

- PostgreSQL, SQL Server, MS Access, MongoDB, IBM Netezza

Cloud Computing

- Amazon Web Service, DigitalOcean

AWARDS & HONORS

- Travel award of $1000 from The Center for Transportation, Equity, Decisions and Dollars 12/2018
- IEEE Big Data 2018 Challenge: 8th place out of 109 teams from 27 countries 11/2018

: 8th place out of 109

- Southeastern Actuaries Conference (SEAC) Scholarship 8/2017
- Network-centric Stochastic Hybrid Dynamic Time-event Process Modeling Scholarship 5/2016
- USF Dean’s List, Graduation with Honor and Summa Cum Laude

LEADERSHIPS & ACTIVITIES

- **Silver medal,** 2018 Sunshine State Games Table Tennis 2018
- **Silver medal,** Florida Orange Blossom Table Tennis Series Summer Classic Open 2018 2018
- **Intramural Champion**, USF Intramural 2015 and 2017 2015, 2017
- **Bronze Medal,** Florida State Closed Tournament, Central Florida Table Tennis 2014
- **President**, Actuarial Society at USF 12/2014 – 5/2016
- **SQL & Python Teacher**, Actuarial Society at USF 1/2017 – 5/2018