

MINH H. PHAM

<https://minhhpham.github.io>

Most updated version of this CV is at <https://minhhpham.github.io/CV>

WORKING EXPERIENCE

Research Associate, Center for Urban Transportation Research – Tampa, FL 5/2017– Present

- Archive real-time transit data using Python and MongoDB on Linux cloud computing
- Predict arrival time with machine learning

Research Associate, USF Department of Pharmaceutical Science – Tampa, FL 5/2018 – 8/2018

- Analyze bio-chemical and pharmaceutical data

Graduate Assistant, Statistics Coordinator - Academic Success Center – Tampa, FL 12/ 2016 – 1/2017

- Setup and maintained the department's database from unstructured and diverse data sources
- Maintained and improved the department's automatic programs using Python

Actuarial Analyst

Metlife – Bridgewater, NJ 8/2015 – 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

EDUCATION

University of South Florida, Tampa, FL 5/2018

- Master of Arts in Statistics (GPA 4.0)

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)

PUBLICATIONS

Journal Articles

Lester, A. B., Winters, P. L., & **Pham, M.** (2019). Segment: Applicability of an Existing Segmentation Technique to Transportation Demand Management Campaigns in the United States. Transportation Research Record, 0361198119844248.

Hao Y, Cheng F, **Pham M**, Rein H, Patel D, Fang Y, Feng Y, Yan J, Song X, Yan H, Wang Y (2019). A Noninvasive, Economical, and Instant-Result Method to Diagnose and Monitor Type 2 Diabetes Using Pulse Wave: Case-Control Study. *JMIR mHealth and uHealth* 2019;7(4):e11959. doi: <https://doi.org/10.2196/11959>

Lu, Y., Ramachandra, A. C. V., **Pham, M.**, Tu, Y. C., & Cheng, F. (2019). CuDDI: A CUDA-Based Application for Extracting Drug-Drug Interaction Related Substance Terms from PubMed Literature. *Molecules*, 24(6), 1081.

Pham, M., Cheng, F., & Ramachandran, K. (2019). A Comparison Study of Algorithms to Detect Drug–Adverse Event Associations: Frequentist, Bayesian, and Machine-Learning Approaches. *Drug safety*, 1-8. doi: <https://doi.org/10.1007/s40264-018-00792-0>

Pham, M. H., Tsokos, C., & Choi, B.-J. (2018). Maximum likelihood estimation for the generalized Pareto distribution and goodness-of-fit test with censored data. *Journal of Modern Applied Statistical Methods*, 17(2), eP2608. doi: 10.22237/jmasm/1553261471

Pham, M. H., & Kafle, R. C. (2016). Competing Risks Analysis of African American Breast Cancer Patients. *Advances in Breast Cancer Research*, 6(01), 28.

Pham, M. H. (2014) "Survival Analysis - Breast Cancer," Undergraduate Journal of Mathematical Modeling: One + Two: Vol. 6: Iss. 1, Article 4. DOI: <http://dx.doi.org/10.5038/2326-3652.6.1.4860>.

Journal Articles Under Review.

Tang, Z., **Pham, M.H**, Hao, Y., Patel, D., Jean-Baptiste, L., Wang, Y., Cheng, F. The Association of Common Lab Test Biomarkers and Nonalcoholic Fatty Liver Disease in Adults.

Conference Proceedings

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

Pham M., Lin J., Zhang Y. (2018). Diagnosing Voice Disorder with Machine Learning. In *Proceedings of 2018 IEEE International Conference on Big Data*.

Thesis

Pham, M. H. (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)

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 following.

Operating System

- Ubuntu Linux

Programming

- R: performed most projects and research with R, gave a presentation about machine learning with R
- Python, Java, Bash (Unix shell): use daily at current work

Databases Management

- IBM Netezza, SQL Server, MS Access, MongoDB

Cloud Computing

- Amazon Web Service, DigitalOcean

AWARDS & CREDENTIALS

- 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
- 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
- Actuarial Exams: P (6/2013), FM(7/2014), C & MFE (7/2016, passed both in the same week!)

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