

STUDENT INTERACTIONS

Fokoué, Ernest

FORMER RESEARCH STUDENTS

- ☐ Wilcox, K. Tyler, MS Thesis Advisee (2017). PhD student in Quantitative Psychology at the *University of Notre Dame, South Bend, Indiana, USA*.
- ☐ Young, Jessica, MS Thesis Advisee (2017). Data Scientist at the *University of Notre Dame, South Bend, Indiana, USA*.
- ☐ Floyd, Calvin, MS Thesis Advisee (2017). Data Scientist at the *Sports, USA*.
- ☐ Ravi, Lakshmi, Research Assistant (2017). Promoted to Data Position with the Alexa Project at *Amazon Corporation, Seattle, Washington, USA*.
- ☐ Ramos, André Lobato, MS Thesis Advisee (2016). Data Scientist with Globos in *Sao Paulo, Brazil*.
- ☐ Olinto, Gabriela Guimaraes, MS Thesis Advisee (2016). Data Scientist at Amazon in *Brazil*.
- ☐ Houston, Paige, MS Thesis Advisee (2016). Data Scientist at *Soleo Communications, Fairport, New York, USA*.
- ☐ Yang, Shiteng, MS Thesis Advisee (2016). PhD student in Statistics at *Oklahoma State University, Stillwater, Oklahoma, USA*.
- ☐ Corsetti, Matthew, Research Assistant (2015). PhD student in Statistics at the *University of Rochester, Rochester, New York, USA*.
- ☐ Bill, Jo, MS Thesis Advisee (2015). Data Scientist at the *United States Department of Defense*.
- ☐ Yu, Xingchen, MS Thesis Advisee (2015). PhD student in Statistics at the *University of California at Santa Cruz, Santa Cruz, California, USA*.
- ☐ Liu, Bohan, MS Thesis Advisee (2016). Seeking PhD studentship in Statistics or Computer Science.
- ☐ Qahl, Sahal, MS Thesis Advisee (2014). PhD student in Statistics at the *University of Calgary, Canada*.
- ☐ Elshrif, Mohamed, Research Assistant (2015). Postdoctoral Research Fellow in *Qatar, Middle East*.
- ☐ Ma, Zichen, MS Thesis Advisee (2014). PhD student in Statistics at the *University of South Carolina, Columbia, South Carolina, USA*.
- ☐ Cretekos, Ellen, MS Thesis Advisee (2013). Statistician at the *Excellus BlueCross Blue Shield, Rochester, New York, USA*.

- Ly, Vi, Research Assistant (2015). Statistical Data Analyst at the *M&T Bank, Buffalo, New York, USA*.
- Ladage, Anurag, MS Thesis Advisee (2014). PhD student in Industrial Engineering at the *University of Mumbai, India*.
- Jauhari, Shruti, Research Assistant (2015). Tapeout Technology Development Software Engineer at *Intel Corporation, Hillsboro, Oregon, USA*.
- Morankar, Aniket, Research Assistant (2015). Software Engineer at *Citrix Systems, Goleta, California, USA*.

SELECTED REFEREED PUBLICATIONS WITH STUDENT CO-AUTHORS¹

- **Floyd, C. M. and Hoffman, Matthew and Fokoué, Ernest** (2019) Shot-by-Shot Stochastic Modeling of Individual Tennis Points, *Journal of Quantitative Analysis in Sports (JQAS)*, Vol xx, Pages xx-xx, 2019. *Revision Requested by the Editor*.
- Fokoué, E. and **Brimkov, B.** (2018) The Multifaceted Impact of Statistical Methodology and Theory in Data Science, *Mathematics for Applications*, Vol 7, Pages 1-2, 2018. Download here.
- **Elshrif, M.** and Fokoué, E. (2018) Random subspace learning (RASSEL) with Data Driven Weighting Schemes, *Mathematics for Applications*, Vol 7, Pages 11-30, 2018. DOI: 10.13164/ma.2018.02. Download here.
- **Olinto, G. G.** and Fokoué, E. (2018) Kernelized Cost-Sensitive Listwise Ranking, *Mathematics for Applications*, Vol 7, Pages 31-40, 2018. DOI: 10.13164/ma.2018.03.
- **Wu, Q.** and Fokoué, E. and Kudithipudi, D. (2018) An Ensemble Learning Approach to the Predictive Stability of Echo State Networks, *Journal of Informatics and Mathematical Sciences (JIMS)*, Vol 10, Numbers 1-2, Pages 181-199, 2018. <http://dx.doi.org/10.26713/jims.v10i1-2.827>
- **Corsetti, M.** and Fokoué, E. (2018) Nonnegative Matrix Factorization with Toeplitz Penalty, *Journal of Informatics and Mathematical Sciences (JIMS)*, Vol 10, Numbers 1-2, Pages 201-215, 2018. <http://dx.doi.org/10.26713/jims.v10i1-2.851>
- Fokoué, E. and **Ma, Z.** (2018) Bayesian variable selection for linear regression with the κ -G priors, *Communications in Statistics: Theory and Methods*, Vol xx, Number xx, Pages xx-xx, 2018. *Revision Invited by the Editor*.
- **Seo, S.** and Fokoué, E. (2017) Estimation of Community Views on Criminal Justice a Statistical Document Analysis Approach, *Journal of Advances in Mathematics and Computer Science (JAMCS)*, Vol 25, Issue Number 6, Pages 1-21, 2018. DOI : 10.9734/JAMCS/2017/38582
- **Mnatzaganian, J.** and Fokoué, E. and Kudithipudi, D. (2017) A Mathematical Formalization of Hierarchical Temporal Memory's Spatial Pooler, *Frontiers in Robotics and AI*, Vol 3, Article 81, 2017. Download here.

¹Bold face names are student co-authors

- Fokoué, E. and **Ravi, L.** and Kudithipudi, D. (2017) A penalized maximum Likelihood Approach to the Adaptive Learning of the Spatial Pooler Permanence, *In 2017 International Joint Conference on Neural Networks (IJCNN)*, Pages 962-967, May 2017.
- **Zhang, X.** and **Rollins, B.** and Gündüz, N. and Fokoué, E. (2017) Estimating the strength of the impact of rushing attempt in NFL game outcomes, *British Journal of Mathematics & Computer Science*, Vol 22, Number 4, Pages 1-12, 2017. DOI: 10.9734/BJMCS/2017/31565.
- **Jha, U. K.** and Bajorski, P. and Fokoué, E. and Van Aardt, J. and Anderson, G. (2017) Dimensionality Reduction of High-Dimensional Highly Correlated Multivariate Grapevine Dataset, *Open Journal of Statistics*, Vol 7, Number 4, Pages 702-717, 2017.
- Rantanen, E. M. and Fokoué, E. and Gegner, K. and **Haut, J.** and Overbye, T. J. (2017) Data properties underlying human monitoring performance, *In Human Factors and Ergonomics Society 2017 Annual Meeting*, Pages 1711-1715. SAGE Publications, October 2017. <http://journals.sagepub.com/doi/10.1177/1541931213601976>.
- **Jauhari, S.** and **Morankar, A.** and Fokoué, E. (2017) Predictive Analytics Tools for Identifying The Keys to Victory in Professional Tennis, *Journal of Computer and Communications*, Vol xx, Number xx, Pages xx-xx, 2017. To appear
- **Ly, V.** and Fokoué, E. (2016) Frequentist Approximation of the Bayesian Posterior Inclusion Probability by Stochastic Subsampling, *British Journal of Mathematics & Computer Science*, Vol 18, Number 5, pp 1-22, 2016. DOI:10.9734/BJMCS/2016/27023.
- **Zhang, X.** and Bramati, M. C. and Fokoué, E. (2016) Using Dynamic Bayesian Networks to Characterize and Predict Job Placement, *ICCSS 2017: International Conference on Computational Social Science, Amsterdam, The Netherlands, (May 14-15, 2017)*, Volume 3, Number 5, Page 3035, 2016.
- **Corsetti, M.** and Fokoué, E (2015) Nonnegative Matrix Factorization with Zellner Penalty, *Open Journal of Statistics*, Vol. 5, No. 7, pp. 777-786, December 2015.
- **Liu, B.** and Fokoué, E (2015) Random Subspace Learning Approach to High-Dimensional Outliers Detection, *Open Journal of Statistics*, Vol. 5, No. 6, pp. 618-630, October 2015.
- **Bill, J.** and Fokoué, E (2014) A Comparative Analysis of Predictive Learning Algorithms on High-Dimensional Microarray Cancer Data, *Serdica Journal of Computing*, Volume 8, Number 2, pp 137-168, 2014.
- **Ma, Z.** and Fokoué, E (2014) Accent Recognition For Noisy Audio Signals, *Serdica Journal of Computing*, Volume 8, Number 2, pp 169-182, 2014.
- **Yu, X.** and Fokoué, E (2014) Probit Normal Correlated Topic Models, *Open Journal of Statistics*, Vol. 4, No. 11, pp. 879-888, December 2014.
- **Ma, Z.** and Fokoué, E (2014) A Comparison of Classifiers in Performing Speaker Accent Recognition Using MFCCs, *Open Journal of Statistics*, Vol. 4, No. 4, 258-266, 2014.

To understand God's thoughts, one must study statistics ... the measure of His purpose.
Florence Nightingale

RESEARCH SUPERVISION ACTIVITIES

- Twagirayezu, Jean Pierre and Fokoué, E. (2017-2018). Kernel Regression with Network Cohesion. Thesis for Master of Science in Mathematical Sciences, *African Institute for Mathematical Sciences (AIMS), Kigali, Rwanda*.
- Wu, Qiuyi. and Fokoué, E. (2017-2018). Statistical Topic Modelling Methods for Music Mining and Improvisation Recognition. Master of Science Thesis, RIT.
- Sanford, Roland and Fokoué, E. (2017-2018). On Some Probabilistic Concentration Inequalities for Algorithm-Dependent Bounds on the Generalization of Statistical Learning Machines. Master of Science Thesis, RIT.
- Yang, Yidan and Fokoué, E. (2017-2018). State of the Methods for Statistical Face Recognition. Master of Science Thesis, RIT.
- Wilcox, K. Tyler and Fokoué, E. (2015-2017). Bayesian Hidden Markov Topic Models. Master of Science Thesis, RIT.
- Young, Jessica and Fokoué, E. (2016-2017). Predicting Cholera Positive Cases in Haiti. Master of Science Thesis, RIT.
- Floyd, Calvin M. and Fokoué, E. and Hoffman, M. (2016-2017). Applying Multi-Resolution Stochastic Modeling to Individual Tennis Points. Master of Science Thesis, RIT.
- Wu, Qiuyi. and Fokoué, E. (2017-2018). Statistical Methods and Computation for Ensembles of Echo State Networks. Master of Science Thesis, RIT.
- Lobato-Ramos, A. and Fokoué, E. (2015-2016). Random Adaptive Subspace Learning with Evolutionary Weights. Master of Science Thesis, RIT.
- Olinto, G. and Fokoué, E. (2015-2016). Predicting Optimal Ranking in Rare Event Context. Master of Science Thesis, RIT.
- Houston, P. and Fokoué, E. (2015-2016). Derivation of some theoretical bounds on the generalization error in adaptive boosting. Master of Science Thesis, RIT.
- Yang, S. and Fokoué, E. (2015-2016). Optimal Music Genre and Artist Recognition from Noisy Audio Tracks. Master of Science Thesis, RIT.
- Wilcox, K. T. and Fokoué, E. (2015-2016). Adaptive Nonhomogeneous Ensemble Learning for Optimal Prediction. Master of Science Thesis, RIT.
- Corsetti, M. and Fokoué, E. (2015-2016). Regularized Nonnegative Matrix Factorization with Application to Image Classification. Master of Science Thesis, RIT.
- Bill, J. and Fokoué, E. (2013-2014). Statistical and Computational Characterization of Machine Learning Algorithms on High Dimensional Low Sample Size Big Data. Master of Science Thesis, RIT.

- Yu, X. and Fokoué, E. (2013-2014). Efficient Bayesian Learning Approach to Probit Normal Correlated Models. Master of Science Thesis, RIT.
- Liu, B. and Fokoué, E. (2013-2014). Regularized Minimum Covariance Determinant (RMCD) for ε -Contaminated on Large p small n data. Master of Science Thesis Project, RIT.
- Qahl, S. and Fokoué, E. (2013-2014). A Text Mining Approach to the Determination of Sacred Texts Similarities. Master of Science Thesis, RIT.
- Elshrif, M. and Fokoué, E. (2013-2014). Adaptive Random Subspace Learning for Efficient Optimal Predictive Ensembles on Large p small n data. Regular Research, RIT.
- Cretekos, E. and Fokoué, E. (2012-2014). Comprehensive Analysis of Faculty Perception of Student Evaluation. Master of Science Thesis, RIT.
- Zichen Ma and Fokoué, E. (2013-2014). Statistical Machine Learning Techniques for Audio Signal Processing with Application to Dialect/Accent Classification. Master of Science Thesis, RIT.
- Ly, V. and Fokoué, E. (2013-2014). Frequentist Approximation of Bayesian Posterior Inclusion Probability via Stochastic Subsampling. Regular Research, RIT.
- Ladage, A. and Grasman, S. and Fokoué, E. (2013-2014). Efficient Supply Chain Prediction by Combination of Machine Learning Techniques and Traditionional Optimization. Master of Science Thesis, Department of Industrial and Systems Engineering, RIT.
- Rollins, B. and Fokoué, E. (2012-2013). Predicting success in the National Football League - An in-depth look at the factors that differentiate the winning teams from the losing teams. Regular Research, RIT.
- Korach, N. and Fokoué, E. (2012-2013). A Quantitative Analysis of Success Factors in the Association of Tennis Professionals. Regular Research, RIT.
- Hoff, B. and Fokoué, E. (2013-2014). Linear and Nonlinear Principal Component Analysis Methods for Highly Accurate Face Recognition . Regular Research, RIT.
- Jauhari, S. and Morankar, A. and Gündüz, N and Fokoué, E. (2013-2014). A Quantitative Analysis of Success Factors in the Association of Tennis Professionals. Regular Research, RIT.
- Foehrenbach, D. and Fokoué, E. (2011-2012). On the optimal prediction of team performance in the NFL. Regular Research, RIT.