

Fokoué, Ernest

EDUCATION

- Ph.D** Department of Statistics, *University of Glasgow*, Scotland (2001).
Dissertation: Contribution to the Analysis of Latent Structures
Advisor: *Professor D. M. Titterton*
- M.Sc** Neural Computing Research Group, *Aston University*, England (1998).
Thesis: Mean Field Methods for Gaussian Process Classifiers
- Maîtrise** Maths and Computing, *University of Yaoundé*, Cameroon, (1990).
- B.Sc** Maths and Computing, *University of Yaoundé*, Cameroon, (1989).

RESEARCH INTERESTS

- Bayesian Statistical Methodology, Theory, Computation and Applications.
- Statistical Learning Theory, Machine Learning and Data Science.
- Artificial Intelligence, Neural Networks and Biologically Inspired Learning Systems.

ACADEMIC EXPERIENCE

- Professor, Rochester Institute of Technology, USA, *May 2019 - Present*.
- Program Co-Leader and Co-Organizer, **Games, Decisions, Risk and Reliability**, *Statistical and Applied Mathematical Science Institute, Fall 2019 - Spring 2020*.
- Senior Visiting Scholar, School of Mathematical Sciences, Fudan University, Shanghai, People's Republic of China, *July-August 2018 and subsequent summers*.
- PhD Advisor in Data Science, African Center of Excellence in Data Science (ACE-DS), Kigali, University of Rwanda, *January 2018-Present*.
- Visiting Professor of Statistical Machine Learning and Data Science, African Institute for Mathematical Sciences (AIMS), Kigali, Rwanda, *January 2018-Present*.
- PhD Affiliated Faculty, GCCIS, RIT, *April 2014 - Present*.
- Visiting Professor, Laboratoire de Mathématiques de Bretagne Atlantique (LMBA), Université de Bretagne-Sud (UBS), Vannes, France, *June. 2015 - July 2015*.
- Graduate Affiliated Faculty, Center for Imaging Science, RIT, *April 2014 - Present*.
- Associate Professor, Rochester Institute of Technology, USA, *April. 2012 - Present*.
- Assistant Professor, Rochester Institute of Technology, USA, *Aug. 2009 - March 2012*.
- Visiting Research Fellow, Statistical and Applied Mathematical Science Institute/Duke University, Research Triangle Park, North Carolina, USA, *Jan 09 - Mar 09*.
- Assistant Professor of Mathematics, Kettering University, USA, *Sep. 2006 - May 2009*.
- Assistant Professor of Statistics, The Ohio State University, USA, *Oct. 2001 - Sep 2005*.
- Postdoctoral Research Fellow and Visiting Research Assistant Professor, Statistical and Applied Mathematical Science Institute and Duke University, USA, *Sep 03 - Aug 04*.

HONORS AND DISTINCTIONS

- Invited Speaker, *February Fourier Talks 2018*, Norbert Wiener Center, Department of Mathematics, University of Maryland, College Park, MD, February 14-16, 2018. <http://www.norbertwiener.umd.edu/FFT/2018/index.html>
- Keynote Speaker, *2017 UNIK International Scientific Research Conference*, Rwamagan, Republic of Rwanda (Africa), July 13-14, 2017.
- Keynote Speaker, *International Conference SADA 2016*, Cotonou, Republic of Benin (Africa), Nov 28-Dec 3, 2016.
- Keynote Speaker, *StatLearn 2016.*, Annual of Statistical Machine Learning Workshop organized by Société Française de Statistique, France, April 2016.
- Keynote Speaker, *Flint International Statistics Conference*. Flint, Michigan, June 2014.
- Elected Member, of the *International Statistical Institute*. Distinction/Recognition conferred for Contribution to Statistical Science (2012).
- Leadership Recognition Award, awarded by the *American Statistical Association*. Recognition conferred for exemplary leadership of the Rochester Chapter of the ASA (2012).
- Winner of the Young Researchers' Prize, awarded by the *International Association of Statistical Computing*. Prize received at the Computational Statistics Conference (2000) in Utrecht, Netherlands.

BOOKS

- Clarke, B, Fokoué, E and Zhang, H (2009). *Principles and Theory for Data Mining and Machine Learning*. Springer Verlag, New York, (ISBN: 978-0-387-98134-5), (2009).
- Fokoué, E (2016-present). *Statistical Machine Learning for Data Science*. *In preparation*.

PROFESSIONAL MEMBERSHIPS

- Elected Member of the International Statistical Institute
- Member of the American Statistical Association
- Member of the International Neural Networks Society
- Member of the American Association for the Advancement of Science
- Member of the IEEE
- Member of the International Association for Statistical Computing.

LANGUAGE PROFICIENCY

- English, French, Spanish, Italian, Dialect (Excellent)
- Russian, German, Portuguese (Very good)
- Chinese, Japanese (Basic)

PROFESSIONAL SERVICE

- General Chair, Founder and Lead Organizer, UP-STAT Conference Series, Annual Conference of the Upstate New York Chapters of the American Statistical Association (ASA), UP-STAT 2012, 2013, 2014, 2015, 2016, 2017, 2018. View recent UP-STAT page [here](#).

- Founding Coordinator, and Lead Organizer, ASA DataFestRIT, Annual National Statistical Data Science Competition, coordinated by the American Statistical Association (ASA), UP-STAT 2017, 2018.
- President, Rochester Chapter, American Statistical Association, July 2011-July 2014.
- Member of the search committee for the *Head of the Department of Industrial and Systems Engineering*, Academic Year 2010-2011, RIT, USA.
- Member of the committee. *RIT Global Education Task Force*, 2011-present, RIT, USA.
- Member of the Founding Committee. *MS in Data Science*, March 2014-present.

ORGANIZATIONAL AND LEADERSHIP ACTIVITIES

- General Chair, Founder and Lead Organizer, UP-STAT Conference Series, Annual Conference of the Upstate New York Chapters of the American Statistical Association (ASA), UP-STAT 2012, 2013, 2014, 2015, 2016, 2017, 2018.
- Founding Coordinator, and Lead Organizer, ASA DataFestRIT, Annual National Statistical Data Science Competition, coordinated by the American Statistical Association (ASA), UP-STAT 2017, 2018.
- Founder and Leader of the Data Science Research Group (DSRG), *Center for Quality and Applied Statistics, Rochester Institute of Technology*, August 2009-Present.
- Organizer of the section Bayesian Methods for Inverse Problems, *59th Conference of the International Statistical Institute, Durban, South Africa*, August 2009.
- Member of the Scientific Committee. International Conference of Mathematical Sciences, 04-10 August 2009, Istanbul, Turkey.
- Chair of the Data Mining II session at the 2004 Meeting of the International Federation of Classification Societies, Chicago, IL, 2004.
- Organizer and Leader of the Bayesian team of the Support Vector Machine group within the SAMSI Data Mining and Machine Learning Program, 2003-2004.

AWARDS AND GRANTS

- March 2001, Workshop Participation Grant, *Nonlinear Estimation and Classification*, Mathematical Sciences Research Institute, University of California, Berkeley, CA, USA.
- September 2000, Conference Participation Grant, *Spatial and Computational Statistics*, Ambleside, United Kingdom.
- Oct. 1999 - Sep 2001, Graduate Teaching Assistantship and Research Studentship, Department of Statistics, University of Glasgow, United Kingdom.
- Oct. 1998 - Sep 1999, PhD. Research Studentship, Department of Statistics University of Glasgow, United Kingdom.
- Jun. 1998 - Sep 2000, PhD. Research Studentship, School of Mathematics University of Derby, United Kingdom. *Grant not used due to move to the University of Glasgow.*
- Oct. 1997 - Oct. 1998, MSc Research Studentship (Stipend for Maintenance), Neural Computing Research Group Aston University, United Kingdom.
- Oct. 1999 - Sep 2000, Master of Science Research Studentship (Overseas Tuition Fees), ODASS British Government Overseas Scholarship, United Kingdom.
- Oct. 1986 - Sep 1991, Undergraduate and Postgraduate Scholarship, Ministry of Higher Education, Cameroon.

SELECTED REFEREED PUBLICATIONS¹

- Gündüz, N. and Fokoué, E. (2021) Understanding Students' Evaluations of Professors using Non-negative Matrix Factorization, *Journal of Applied Statistics*, Volume 48, Number 13-15, Pages 2961-2981, 2021. DOI: 10.1080/02664763.2021.1991288 Download here.
- Fokoué, Ernest (2021) Kernel Regression, *Wiley Statistics Reference Online.*, DOI:10.1002/9781118445112.stat08259, Find it here, Pages 1-28. John Wiley and Sons, Ltd, 2021.
- Murray, Ryan W. and Fokoué, Ernest (2021) Dropout Fails to Regularize Nonparametric Learners, *Journal of Statistical Theory and Practice.*, Volume 15, Pages 1-20, 2021.
- Pei, E. and Fokoué, Ernest (2021) Graph Enhanced High Dimensional Kernel Regression, *ArXiv 2011.01990.*, stat.ML, November, 2020. <https://arxiv.org/abs/2011.01990>. Download here.
- Fokoué, Ernest (2020) Model Selection for Optimal Prediction in Statistical Machine Learning, *Notices of the American Mathematical Society.*, Volume 67, Number 2, Pages 155-168, February, 2020. Paper invited by the President of the AMS. (2020). DOI: <https://doi.org/10.1090/noti2014>. Download here.
- Babbitt, Gregory A. and Lynch, Miranda L. and McCoy, Matthew and Fokoué, Ernest P. and Hudson, André O. (2020) Function and evolution of B-Raf loop dynamics relevant to cancer recurrence under drug inhibition, bioRxiv 904052; DOI:<https://doi.org/10.1101/2020.01.13.904052>. Download here.
- Babbitt, Gregory A. and Lynch, Miranda L. and McCoy, Matthew and Fokoué, Ernest P. and Hudson, André O. (2020) Function and evolution of B-Raf loop dynamics relevant to cancer recurrence under drug inhibition. *Journal of Biomolecular Structure and Dynamics*, Volume 0, Issue 0, Pages 1-16, Year 2020, Publisher Taylor & Francis, PMID: 32897175. <https://doi.org/10.1080/07391102.2020.1815578>. Download here.
- Babbitt, Gregory A. and Fokoué, Ernest P. and Evans, Joshua R. and Diller, Kyle I. and Adams, Lily E. (2020) Machine learning based detection of genetic and drug class variant impact on functionally conserved protein binding dynamics, bioRxiv 724211; DOI:<https://doi.org/10.1101/724211>. Download here.
- **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 16, Number 1. Pages 57-71, October, 2019. DOI:<https://doi.org/10.1515/jqas-2018-0036>. Download here
- Fokoué, E. (2019) On the Versatility and Polyvalence of Certain Statistical Learning Machines, *Mathematics for Applications*, Vol 8, Pages 97-99, 2019. Download here.
- **Raja, S. and Fokoué, E.** (2018) Multi-stage Fault Warning for Large Electric Grids sing Anomaly Detection and Machine Learning, *Mathematics for Applications*, Vol 8, Pages 115-130, 2019. DOI: 10.13164/ma.2019.08. Download here.
- **Sah, P. and Fokoué, E.** (2018) What do Asian and non-Asian scriptures have in common? An applied statistical machine learning inquiry, *Mathematics for Applications*, Vol 8, Pages 151-171, 2019. DOI: 10.13164/ma.2019.10. Download here.
- **Ogundepo, E. A. and Fokoué, E.** (2018) An Empirical Demonstration of the No Free Lunch Theorem, *Mathematics for Applications*, Vol 8, Pages 173-188, 2019. DOI: 10.13164/ma.2019.11. Download here.

¹Bold face names are student co-authors

- Fokoué, E. (2019) On the Ubiquity of the Bayesian Paradigm in Statistical Machine Learning and Data Science, *Mathematics for Applications*, Vol 8, Pages 189-209, 2019. DOI: 10.13164/ma.2019.12. Download here.
- 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. (2018) To Bayes or Not to Bayes? That's No Longer the Question. *Indian Bayesian Society Newsletter*, Vol XV, Number 1, Pages 2-5. Featured Paper.
- 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.
- 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.
- Gündüz, N. and Fokoué, E. (2017) Predictive Performances of Implicitly and Explicitly Robust Classifiers on High Dimensional Data, *Communications Series A1: Mathematics and Statistics*, Volume 66, Number 2, Pages 14-36, 2017. DOI:10.1501/Commua10000000797. Download here.
- Gündüz, N. and Fokoué, E. (2017). On the Predictive Properties of Binary Link Functions, *Communications Series A1: Mathematics and Statistics*, Volume 66, Number 1, Pages 1-18, 2017. DOI:10.1501/Commua10000000770. Download here.
- **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
- N. Gündüz and E. Fokoué (2016) An Information-Theoretic Alternative to the Cronbach's Alpha Coefficient of Item Reliability, *British Journal of Mathematics & Computer Science*, Volume 15, Number 1, Pages 1-9, 2016. DOI:10.9734/BJMCS/2016/23944.
- **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.
- Fokoué, E. (2016) Prediction Error Reduction Function as a Variable Importance Score, *British Journal of Mathematics & Computer Science*, Vol 15, Number 3, Pages 1-9, 2016. DOI:10.9734/BJMCS/2016/23945.
- Fokoué, E (2016), Unsupervised Learning, *Wiley StatsRef: Statistics Reference Online*, pp. xx-xx, 2016. Published by Wiley. Invited Paper, (To appear)
- **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.
- Dey, T. and Fokoué, E (2015) Bayesian Variable Selection for Predictively Optimal Regression, Book Chapter, *Current Trends in Bayesian Methodology with Applications*, Editors, Dipak K. Dey, Umesh Singh and A. Loganathan, Published by Chapman & Hall/CRC Press, 2015.
- Fokoué, E (2014) A Taxonomy of Big Data for Optimal Predictive Machine Learning and Data Mining, *Serdica Journal of Computing*, Volume 8, Number 2, pp 111-136, 2014.
- **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.

- Fokoué, E (2014) A Taxonomy of Big Data for Optimal Predictive Machine Learning and Data Mining, *Journal of Computing*, (To appear)
- Fokoué, E (2013) Simultaneous Variable Selection and Sensor Selection using Convex Penalties, *Interstat*, April 2013.
- Fokoué, E (2012) Beta Induced Sparsity Algorithm, *Advances and Applications in Statistical Sciences*, Volume 7, Issue 7, October 2012, Pages 75-82
- Fokoué, E (2011) Stable Radial Basis Function Selection via Mixture Modelling of the Sample Path, *Journal of Data Science*, Vol 9, Issue 3, pp. 345-358, October 2011.
- Fokoué, E and Sun, D. and Goel, P. (2011) Fully Bayesian Analysis of the Relevance Vector Machine With Extended Prior, *Statistical Methodology*. Vol 8, Pages 83-96, 2011.
- Fokoué, E and Goel, P. (2011) An Optimal Experimental Design Perspective on Radial Basis Function Regression, *Communications in Statistics: Theory and Methods*, Vol 40, Issue 6, Pages 1-12, 2011.
- Fokoué, E and B. Clarke (2009) Bias Variance Trade off for Prequential Model List Selection, *Statistical Papers*. Here, 2009.
- Fokoué, E (2009) Bayesian computation of the Intrinsic Structure of Factor Analytic Models, *Journal of Data Science*, Volume 7, Number 3, pp. 285-311, 2009.
- Fokoué, E. (2009) Latent Variable Models in Heterogeneous Spaces for Observations of Mixed Types , *Communications in Statistics - Theory and Methods*. 38, pp. 1-12, 2009
- Fokoué, E. (2008) Foundational Aspects of the Theory of Statistical Function Estimation and Pattern Recognition, *Bulletin of PFUR, Series Mathematics, Information Sciences, Physics*. 3, pp. 40-54, 2008.
- Fokoué, E. (2007) Estimation of Atom Prevalence for Optimal Prediction, *Contemporary Mathematics*, Vol 443, pp 103-129, The American Mathematical Society.
- Fokoué, E. (2004) Mixtures of Factor Analysers: An Extension with Covariates. *Journal of Multivariate Analysis*, 95, 370-384
- Fokoué, E. and Titterton, D. M. (2003) Mixtures of Factor Analysers: Bayesian Estimation and Inference by Stochastic Simulation, *Machine Learning*, 50, 73-94.
- Csató, L., Fokoué, E, Opper, M, Schottky, B., Winther, O. (2000) Efficient Approaches to Gaussian Process Classification, *Advances in Neural Information Processing Systems 12*, S. A. Solla, T. K. Leen, K.-R. Müller, eds., MIT Press, 2000.

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

MANUSCRIPTS IN PREPARATION FOR SUBMISSION

- Lu, Wenlian and Fokoué, E. (2018). *An Integrated Regularization Framework of Brain-wide Association Learning with Application to Detection of Schizophrenia from fMRI data*. *Journal*, Pages xx-xx, 2018. In Preparation.
- **Raja, Sanjeev** and **Luo, Joyce** , and Fokoué, E (2018) Novel Detection, Pattern Recognition and Early Warning for Large Electric Grid Networks, *In preparation*, 2019.
- **Sanford, Roland** and Fokoué, E. (2019). *Bounds on the generalization error of learning machines trained via Stochastic Gradient Descent under various Runge-Kutta conditions*. *Journal*, Pages xx-xx, 2019. In Preparation.

- **Wu, Qiuyi** and Fokoué, E. (2019). *Statistical Discovery of Musical Topics: A case study on a Jazz Corpus. Journal*, Pages xx-xx, 201. In Preparation.
- Fokoué, E. (2019). *Comprehensive Kernel Regression with Network Cohesion. Journal*, Pages xx-xx, 2018. In Preparation.
- Gündüz, N. and Fokoué, E. (2018). *A dedicated combinatorial distance for ordinal Likert-type statistical learning tasks. Journal*, Pages xx-xx, 2018. In Preparation.
- Fokoué, E (2018) A Taxonomy of Massive Data for Data Mining, *WIREs Data Mining and Knowledge Discovery*, Published by Wiley. Invited Paper, (To appear)
- Fokoué, E (2018) Kernel Regression, *WIREs Computational Statistics*, Published by Wiley, Invited Paper, (To appear)
- Fokoué, E. (2018) Statistical Building Blocks of Data Science, *Submitted*, Vol xx, Number xx, pages xx-xx, 2018. In preparation.
- **Wilcox, K. T.** and Fokoué, E. (2019) Bayesian Estimation for Hidden Markov Topic Models, *Journal*, Pages xx-xx, 2019. In preparation.
- **Sah, P. K** and Fokoué, E (2018). Random Subspace Learning Approach to High-Dimensional Outliers Detection, Pages xx-xx, 2018. In preparation.
- Fokoué, E. (2018). *A Spectral Regression for Large p small n data. Journal*, Pages xx-xx, 2018. In Preparation.
- **Qahl, S.** and Fokoué, E (2018). A Text Mining Approach to Measuring Sacred Texts Similarity, *Open Journal of Statistics*, Vol. 5, No. , pp. xxx-xxx, December 2018.
- Gündüz, N. and Fokoué, E. (2019) Statistical Discovery of Striking Patterns in the Evaluation of Professors by Students, , 2019. To be Submitted.

EDITORIAL AND REVIEWING ACTIVITIES

- Guest Editor: *Special Issue of Mathematics for Applications, 2018*
- Article Reviewer for: *Bayesian Analysis, Statistical Methodology, Annals of Applied Statistics, Communications in Statistics: Theory and Methods, Computational Statistics, Journal of Machine Learning Research, Computational Statistics and Data Analysis, Journal of Computational and Graphical Statistics, Statistical Analysis and Data Mining, IEEE Signal Processing Letters, Journal of Statistical Planning and Inference, Journal of Mathematical Modelling and Algorithms, Mathematics for Applications, Psychometrika, Tribology, , InterStat, Energies.*
- Grants Reviews: *National Science Foundation (NSF) Research Grant Proposals.*

EXTRAMURAL FUNDING ACTIVITIES

The following table summarizes my extramural funding activities. All the grant proposals in preparation like my current grant proposal for the UP-STAT conference series, are not shown.

RIT Rapid/Proposals

https://rapid.rit.edu/rapid/proposals_search.php



4/12/2018 10:22 AM

Search Proposals

Current results:

▶ Contains text: *Fokoue*

16 Proposals found

| SRS # | Department | PI | Sponsors | Title | Status | Requested Amt | Submit Date |
|----------|--------------------------------|------------------------|--------------------|---|------------|---------------|-------------|
| 11070361 | KGCOE - Center for Quality and | Fokoue, Ernest | DOE | COMPUTATIONALLY EFFICIENT TECHNIQUES FOR | Not Funded | \$758,142 | 1/20/11 |
| 12060300 | KGCOE - Center for Quality and | Fokoue, Ernest | Praxair, Inc. | Applied Statistical Data Mining Seminar for | Not Funded | \$12,900 | 12/7/11 |
| 12050256 | KGCOE - Center for Quality and | Fokoue, Ernest | Praxair, Inc. | Applied Statistical Data Mining Seminar for | Not Funded | \$12,900 | 11/23/11 |
| 17040200 | COS - SMS - Mathematics & | Fokoue, Ernest | NSF | FRG: Nonparametric Statistical Techniques for | Not Funded | \$710,440 | 10/20/16 |
| 17110640 | CLA - Psychology | Rantanen, Esa | DOE/DOE-BPA | Visualization and Human Factors Considerations for | Pending | \$381,108 | 5/11/17 |
| 15060357 | KGCOE - Computer | Kudithipudi, Dhireesha | Seagate Technology | Custom HTM Architecture integrated with Flash Memory. | Funded | \$135,769 | 12/16/14 |
| 15120693 | COS - SMS - Mathematics & | Harkin, Tony | Citizengine, Inc. | iCitizen Data Science | Withdrawn | \$47,899 | 6/18/15 |
| 16100574 | KGCOE - Computer | Kudithipudi, Dhireesha | NSF | EsCDA: Type I: Collaborative Research: NanoElectronic | Pending | \$379,889 | 4/25/16 |
| 15110614 | CLA - Psychology | Rantanen, Esa | DOE-BPA | Improving Operator Situation Awareness by Phasor | Funded | \$314,705 | 5/7/15 |
| 12110614 | CLA - Psychology | Rantanen, Esa | NASA | Data Mining and Machine-Learning Techniques to Derive | Not Funded | \$443,040 | 5/2/12 |
| 14031603 | CLA - Psychology | Rantanen, Esa | NASA | Objective Measures of System and Human Performance | Not Funded | \$90,940 | 9/23/13 |
| 12050229 | KGCOE - Center for Quality and | Evershed, Gregory | Praxair, Inc. | Applied Statistical Data Mining Seminar for | Funded | \$12,900 | 11/14/11 |
| 12080468 | KGCOE - Industrial & | Proano, Ruben | NSF | Collaborative Research: Facilitating the Analysis of | Not Funded | \$302,819 | 2/21/12 |
| 12060309 | KGCOE - Industrial & | Proano, Ruben | RWJF | Informing the Transition to Bundled Payment | Not Funded | - | 12/8/11 |
| 12120739 | KGCOE - Center for Quality and | Evershed, Gregory | Multiple | Workforce Development - FY2012 [roll-up] | Funded | - | 6/27/12 |
| 13040969 | KGCOE - Center for Quality and | Evershed, Gregory | Multiple | Workforce Development - FY2013 [roll-up] | Funded | - | 10/23/12 |

RECENT CONFERENCE PROCEEDINGS

- **Foehrenbach, D.** and Fokoué, E (2011). On the optimal prediction of team performance in the NFL, *Proceedings of the Joint Statistical Meetings (JSM), Miami Beach, Florida, USA*, August 2011
- Fokoué, E (2009). Efficient Derivation of Sparse Representations in Radial Basis Function Regression, *Proceedings on the 59th Conference of the International Statistical Institute, Durban, South Africa*, August 2009.
- Fokoué, E and B. Clarke (2004). Optimal Model List Selection for Function Approximation. *Proceedings of Interface 2004, Baltimore, MD, USA*.
- Fokoué, E. (2000). A Markov Chain Monte Carlo (MCMC) Approach to the Bayesian Analysis of Mixtures of Factor Analysers. *In Volume of Short Communications and Posters, Proceedings of Computational Statistics, COMPSTAT 2000, Utrecht University and Statistics Netherlands, 2000*.

RECENT TECHNICAL REPORTS AND WORKING PAPERS

- Fokoué, E. and Gündüz, N.(2015). *Information-Theoretical Alternative to the Cronbach's Alpha Coefficient of Item Reliability*. WORKING PAPER, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2015-1, October 2014.
- Fokoué, E. (2014). *Efficient Diagonal Orthant Multicategorical Classification with Application to DNA Microarray Gene Expression Data*. WORKING PAPER, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-8, October 2014.
- Fokoué, E. (2014). *Prediction Error Reduction Function (PERF): Finding the Most Valuable Predictor (MVP)*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-7, October 2014.
- **Yu, X.** and Fokoué, E. (2014). *Probit Normal Correlated Topic Models*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-6, October 2014.
- Gündüz, N. and Fokoué, E. (2014). *Predictive Performance Comparison of Robust Classifiers on ε -Contaminated High Dimension Low Sample Size Data*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-5, September 2014.
- **Elshrif, M.** and Fokoué, E. (2014). *Adaptive Random Subspace Learning for Optimal Predictive Ensembles*. WORKING PAPER, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-4, June 2014.
- Fokoué, E. (2014). *A Spectral Regression for Large p small n data*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-3, May 2014.
- Fokoué, E. (2014). *Harnessing the Predictive Potential of k -Nearest Neighbors Machines*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-2, February 2014.

- **Ly, V.** and Fokoué, E. (2014). *Frequentist approximation of the Bayesian Posterior Inclusion Probability by stochastic subsampling*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2014-1, January 2014. <http://goo.gl/C8U5Q4>
- **Foehrenbach, D.** and Fokoué, E. (2013). *A Statistical Data Mining Approach to Determining the Factors that Distinguish Championship Caliber Teams in the National Football League*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2013-6, November 2013.
- **Ma, Z.** and Fokoué, E. (2013). *Speaker Gender Recognition via MFCCs and SVMs*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2013-5, November 2013.
- **Ma, Z.** and Fokoué, E. (2013). *Modern Multivariate Methods for Accurate Dialect Classification*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2013-4, November 2013.
- Fokoué, E. (2013). *A Taxonomy of Massive Data for Optimal Predictive Machine Learning and Data Mining*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2013-3, November 2013. <http://goo.gl/XbKUhr>
- Gündüz, N. and Fokoué, E. (2013). *Data Mining and Machine Learning Techniques for Extracting Patterns in Students' Evaluations of Instructors*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2013-2, September 2013. <http://goo.gl/JW8eui>
- Gündüz, N. and Fokoué, E. (2013). *On the Predictive Analytics of the Probit and Logit Link Functions*. TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2013-1, September 2013. <http://goo.gl/PwtNpu>
- Fokoué, E (2011). *Optimal Predictive Kernel Regression via Feature Space Principal Components*, TECHNICAL REPORT, Data Science Research Group, Center for Quality and Applied Statistics, Rochester Institute of Technology, Number CQAS-DSRG-2011-1, June 2011.
- Fokoué, E. and B. Clarke(2004). *Optimum Model List Selection for Prediction*. *Technical Report No. 2004-20*. Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC 27709, USA. August 2004.
- Fokoué, E. (2004). *Stochastic Determination of the Intrinsic Structure in Bayesian Factor Analysis*. *Technical Report No. 2004-17*. Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC 27709, USA, June 2004.
- Fokoué, E., and Goel, P. and Sun, D. (2004). *A Prior for Consistent Estimation for The Relevance Vector Machine*. *Technical Report No. 2004-16*. Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC 27709, USA, March 2004.

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.
- Elsharif, 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 Traditional 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.

COMPUTER SKILLS AND PROFICIENCY

- **Computational Mathematics and Statistics** : MATLAB, MAPLE, Minitab (Excellent Proficiency), Mathematica, S-Plus, SAS, R, Ox (Good knowledge)
- **Programming Languages** : C, C++, Visual Basic, Fortran, Matlab. HTML & Web Programming (Excellent Proficiency)
- **Operating Systems** : Unix, Linux, MS DOS, MS Windows 3.x, Windows 9x, IBM Mainframes (Excellent Proficiency)

DATA AND RESOURCE CONTRIBUTIONS

- Wu, Q. and Fokoué, E. (2017). *Epileptic Seizure Recognition Data Set*. UCI Machine Learning Repository [[Web Link]]. Irvine, CA: University of California, School of Information and Computer Science, 2017. Data here.
- Gündüz, N and Fokoué, E. (2013). *Türkiye Student Evaluation Data Set*. UCI Machine Learning Repository [[Web Link]]. Irvine, CA: University of California, School of Information and Computer Science, 2013. Data here.
- Jauhari, S and Morankar, A. and Fokoué, E. (2014). *Professional Tennis Data*. UCI Machine Learning Repository [[Web Link]]. Irvine, CA: University of California, School of Information and Computer Science, 2013. Data here.

FORMER RESEARCH STUDENTS

- Wilcox, K. Tyler, MS Thesis Advisee (2017). Currently PhD student in Quantitative Psychology at the *University of Notre Dame, South Bend, Indiana, USA*.
- Young, Jessica, MS Thesis Advisee (2017). Currently working as Data Scientist at the *University of Notre Dame, South Bend, Indiana, USA*.
- Floyd, Calvin, MS Thesis Advisee (2017). Currently working Data Scientist at the *Draft Kings, USA*.
- Ravi, Lakshmi, Research Assistant (2017). Currently working as Software Development Engineer at *Amazon Corporation, Seattle, Washington, USA*.
- Ramos, André Lobato, MS Thesis Advisee (2016). Currently as Data Scientist in *Sao Paulo, Brazil*.
- Olinto, Gabriela Guimaraes, MS Thesis Advisee (2016). Currently as Data Scientist in *Brazil*.
- Houston, Paige, MS Thesis Advisee (2016). Currently as Data Scientist at *Soleo Communications, Fairport, New York, USA*.
- Yang, Shiteng, MS Thesis Advisee (2016). Currently PhD student in Statistics at *Oklahoma State University, Stillwater, Oklahoma, USA*.
- Corsetti, Matthew, Research Assistant (2015). Currently PhD student in Statistics at the *University of Rochester, Rochester, New York, USA*.
- Bill, Jo, MS Thesis Advisee (2015). Currently working as Data Scientist at the *United States Department of Defense*.
- Yu, Xingchen, MS Thesis Advisee (2015). Currently PhD student in Statistics at the *University of California at Santa Cruz, Santa Cruz, California, USA*.
- Liu, Bohan, MS Thesis Advisee (2016). Currently PhD student in Statistics at the *University of California at Santa Cruz, Santa Cruz, California, USA*.
- Qahl, Sahal, MS Thesis Advisee (2014). Currently PhD student in Statistics at the *University of Calgary, Canada*.
- Elshrif, Mohamed, Research Assistant (2015). Currently Postdoctoral Research Fellow in *Qatar, Middle East*.
- Ma, Zichen, MS Thesis Advisee (2014). Currently PhD student in Statistics at the *University of South Carolina, Columbia, South Carolina, USA*.
- Cretekos, Ellen, MS Thesis Advisee (2013). Currently working as Statistician at the *Excellus BlueCross Blue Shield, Rochester, New York, USA*.
- Ly, Vi, Research Assistant (2015). Currently PhD student in Statistics at the *M&T Bank, Buffalo, New York, USA*.
- Ladage, Anurag, MS Thesis Advisee (2014). Currently PhD student in Industrial Engineering at the *University of Mumbai, India*.
- Jauhari, Shruti, Research Assistant (2015). Currently working as Tapeout Technology Development Software Engineer at *Intel Corporation, Hillsboro, Oregon, USA*.
- Morankar, Aniket, Research Assistant (2015). Currently working as Software Engineer at *Citrix Systems, Goleta, California, USA*.

INVITED LECTURES, INVITED COURSES, INVITED PRESENTATIONS

- Nonparametric Regression and Classification For Modern Data Scientists, *Invited Mini course*, Modern Mathematics Workshop (MMW), San Antonio, Texas, USA, October 9-11, 2018. Visit [here](#).
- Kernel Methods for Machine Learning and Modern Data Science, *Tutorial*, IEEE DSAA 2018, 5th IEEE Data Science and Advanced Analytics International Conference, Turin, Italy, October 1-4, 2018. Visit [here](#).
- Nonparametric Regression and Classification For Modern Data Scientists, *Tutorial*, UP-STAT 2018, 7th Annual Conference of the Upstate New York Chapters of the American Statistical Association, University of Rochester, Rochester, NY, April 20-21, 2018.
- A Brief Tour of Statistical Machine Learning: Foundational Concepts, Methods, Theory, Computation and Applications, *Five Parts Invited Mini course delivered to Graduate students, postdoctoral fellows and research scientists*, School of Mathematical Sciences, Fudan University, Shanghai, People's Republic of China, Summer 2018.
- Learning for Improved Predictive Performance in Ultra-High Dimensional Spaces ($p \gg n$), *Invited Lecture, Weekly Seminar Series*, The RIT Artificial Intelligence Community, Rochester Institute of Technology, Rochester, NY, February 12, 2018.
- Random Subspace Learning for Prediction in Ultra-High Dimensional Spaces ($p \gg n$), *Invited Lecture, February Fourier Talks 2018*, Norbert Wiener Center, Department of Mathematics, University of Maryland, College Park, MD, February 14-16, 2018. More [here](#).
- Fundamentals of Statistical Machine Learning Methods for Big Data Analytics., *Visiting Professor Lecture Series*, African Institute for Mathematical Sciences (AIMS), Kigali, Rwanda, January 2018.
- Insights into Elements of Statistical Theory via fun Computational Simulations with R, *Weekly Colloquium Lecture*, African Institute for Mathematical Sciences (AIMS), Kigali, Rwanda, January 24, 2018.
- Harnessing the Blessings of Data Science through Statistical Mastery, *Invited Lecture to the Incoming Graduate SMS Class*, School of Mathematical Sciences, Rochester Institute of Technology, Rochester, August 2017.
- On the Statistical and Computational Properties of Some Emerging Cortical Learning Networks, *Invited Lecture*, School of Mathematical Sciences, Fudan University, Shanghai, People's Republic of China, August 2017.
- Introduction to Modern Research Methods for New Scientific Investigators, *Post-conference Workshop*, University of Kibungo, Kibungo, Rwanda.
- On the Statistical Building Blocks of Data Science: An Intuitive Exploratory Introduction, *Keynote Lecture*, 2017 UNIK International Conference, Rwamagana, Rwanda.
- Understanding Foundational Statistical Theory via fun Computational Exploration with R, *Lecture to Incoming Students*, Research Experience for Undergraduates (REU), Rochester Institute of Technology, Rochester, NY, July 2017. s
- An Intuitive Introduction to Bayesian Statistical Science, *Tutorial*, UP-STAT 2017, 6th Annual Conference of the Upstate New York Chapters of the American Statistical Association, Canisius College, Buffalo, NY, April 21-22, 2017.

- Statistical Approaches to Anomaly Detection and Intuitive visualization of Phasor Measurement Unit Data from Electric Power Systems., *Special Lecture*, UP-STAT 2017, 6th Annual Conference of the Upstate New York Chapters of the American Statistical Association, Canisius College, Buffalo, NY, April 21-22, 2017.
- Modern Statistical Machine Learning Methods for Short Fat Big Data Analytics., *Weekly Colloquium Lecture*, African Institute for Mathematical Sciences (AIMS), Kigali, Rwanda, January 2017.
- Modern Statistical Machine Learning Methods for Short Fat Big Data Analytics, *Keynote Lecture*, Delivered via Skype, SADA 2016, *SADA International Conference*, Cotonou, Republic of Benin, November 2016.
- Statistical Machine Learning Methods for High Dimensional Data, *Weekly Colloquium Lecture*, Laboratoire de Mathématiques de Bretagne Atlantique (LMBA), Université de Bretagne-Ouest, Brest, France, Spring 2016.
- Random Adaptive Subspace Learning for High Dimension Low Sample Size Data ($n \ll p$), *Keynote Lecture*, StatLearn 2016, *Flagship Annual Conference of the Statistical Machine Learning Society of France*, Vannes, France, April 2016.
- Understanding the Foundations of the Statistical Learning Theory through intuitive examples, *Tutorial*, UP-STAT 2016, 5th Annual Conference of the Upstate New York Chapters of the American Statistical Association, Canisius College, Buffalo, NY, April 22-23, 2016.
- Principles of Statistical Machine Learning, *Visiting Professor Lecture Series*, Laboratoire de Mathématiques de Bretagne Atlantique (LMBA), Université de Bretagne-Sud, Vannes, France, Summer 2015.
- Harnessing the Blessings of Ensemble Learning For High Dimension Low Sample Size Data, *Weekly Colloquium Lecture*, Center for Applied and Computational Mathematics (CACM), School of Mathematical Sciences, Rochester Institute of Technology, Rochester, NY, January 2015.
- Théorie et Pratique de l'Apprentissage Statistique : Enjeux et Perspectives., *Invited Lecture*, Journées de Statistiques 2014, Université Bretagne du Sud, Bretagne, France, November 2014.
- A Taxonomy of Massive Data for Optimal Predictive Machine Learning and Data Mining, *Invited Lecture*, Durham Machine Learning Conference, Durham, NC, USA, June 2014.
- Harnessing the Power of Statistical Methods in an Era of Big Data Predictive Analytics, *Invited Lecture*, Flint International Statistics Conference, Flint, MI, USA, June 2014.
- Statistical Machine Learning Methods for Mining Astronomical Data, *Invited Lecture*, The Carlson Center for Imaging Science, Rochester Institute of Technology, Rochester, NY, USA, April 2014.
- Understanding some foundational statistical theory results via fun computational exploration with R, *Invited Lecture*, UP-STAT 2014, Third Annual Conference of the Upstate New York Chapters of the American Statistical Association, Geneseo, NY, USA, April 2014.
- Modern Mathematical and Statistical Tools for Knowledge Discovery in Big Data, *Invited Lecture*, Mathematics Club, SUNY Binghamton, Binghamton, NY, USA, April 2014.
- Modern Mathematical and Statistical Tools for Knowledge Discovery in Big Data, *Invited Lecture*, Department of Mathematics, SUNY Oswego, Oswego, NY, USA, April 2014.
- Knowledge Discovery in Big Data using R, *Invited Lecture*, The College of William and Mary, Williamsburg, Virginia, USA, March 28, 2014.

- Discovering the fascinating world of big data predictive analytics and some mathematical and statistical tools for conquering it., *Invited Lecture*, Department of Mathematics, SUNY Brockport, Brockport, NY, USA, March 27, 2014.
- Discovering the fascinating world of big data predictive analytics and some mathematical and statistical tools for conquering it., *Invited Lecture*, Department of Mathematics, Buffalo State University, Buffalo, NY, USA, March 7, 2014.
- Taming Big Data with Old and New Mathematical and Statistical Tools, *Invited Lecture*, Department of Mathematics, SUNY Geneseo, October 28, 2013.
- Taming Big Data with Old and New Mathematical and Statistical Tools, *Invited Lecture*, Center for Applied and Computational Mathematics, Department of Mathematical Sciences, Rochester Institute of Technology, October 1, 2013.
- Bayesian Computation: From Foundations to Statistical Machine Learning Applications, *Invited Course/Workshop (Series of three lectures)*, International Conference/Workshop on Bayesian Theory and Applications, Banaras Hindu University, Varanasi, India, January 2013
- A New family of Sparsity Inducing Prior Distributions, *Invited Paper*, International Conference/Workshop on Bayesian Theory and Applications, Banaras Hindu University, Varanasi, India, January 8, 2013
- On some approaches to efficient derivation of sparse representations for optimal prediction with application to classification and regression via kernel methods, *Invited Lecture*, Department of Computer Science, Rochester Institute of Technology, April 26, 2011.
- Foehrenbach, D. and Fokoué, E (2011). On the optimal prediction of team performance in the NFL, *Joint Statistical Meetings (JSM)*, Miami Beach, Florida, USA, August 2013
- Fokoué, E and Rollins, B. (2013). An In-Depth Statistical Approach to Deciphering the Mysterious and Elusive Predictive Power of Third-Down Conversion Percentage in American Football, *Joint Statistical Meetings (JSM)*, Montreal, Quebec, Canada, August 2013
- Fokoué, E (2009). Efficient Derivation of Sparse Representations in Radial Basis Function Regression, *59th Conference of the International Statistical Institute*, Durban, South Africa, August 2009.
- Statistical Machine Learning with Applications to Bioinformatics and Computer Vision, *Invited Speaker*, Pattern Recognition Association of South Africa (PRASA), 18th conference of the PRASA, Durban, Nov 2007.
- Aspects of the Theory of Statistical Function Estimation and Pattern Recognition, *Visiting Professor Lecture*, People's Friendship University of Russia, Moscow, Russia (Nov 2007).
- Bayesian Optimal Prediction via the Selection of Prevalent Atoms, *Invited Lecture*, University of Michigan, Flint, Fall 2007.

CONFERENCES AND WORKSHOPS

- Fokoué, E (2014). Théorie et Pratique de l'Apprentissage Statistique : Enjeux et Perspectives., *Journées de Statistiques 2014*, Université Bretagne du Sud, Bretagne, France, November 20-22, 2014.
- Fokoué, E (2014). Elements of Bayesian Analysis for Big Data Predictive Analytics, *Durham Machine Learning Conference*, Durham, NC, USA, June 9-11, 2014.

- Fokoué, E (2011). Naturally Efficient Sparsity Tuner for Optimal Predictive Kernel Regression and Beyond, *Joint Statistical Meetings, JSM 2011*, Miami Beach, Florida, USA July 30-August 4, 2011.
- Fokoué, E (2009). Efficient Derivation of Sparse Representations in Radial Basis Function Regression, *59th Conference of the International Statistical Institute, Durban, South Africa*, August 2009.
- Fokoué, E (2009). Variational Mean Field Approximation for Multitarget Tracking, *Joint Statistical Meetings (JSM)*, Washington, DC, August 4th, 2009.
- Fokoué, E (2008). Latent Variable Models, *Joint Statistical Meetings (JSM)*, Salt Lake City, Utah, July 27th-July 31st, 2008.
- Technical Highlights of the Large p small n working group, *Data Mining and Machine Learning Closing Workshop*, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, USA (2004).
- Problem list presentation for the Support Vector Machines working group, *Data Mining and Machine Learning Closing Workshop*, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, USA (2004).
- Bayesian Analysis of SVM and SVM-like techniques: The Present and Some Ideas for the Future, *Data Mining and Machine Learning Mid year workshop*, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, USA (2004).
- Variational Mean Field for Gaussian Processes, *Postdoctoral Seminar Series*, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, USA, Nov 2003.
- Analysis of Latent Structures with Outcomes of different types, *Joint Statistical Meetings*, San Francisco, USA (2003).
- SAMSI Stochastic Computation Workshop (2002), Research Triangle Park, North Carolina, USA. Poster presented on MCMC Methods for Factor Analytic Models.
- First Cape Cod Conference on Monte Carlo Methods (2002), Cape Cod, Massachusetts, USA. Poster presented on MCMC Methods for Factor Analytic Models.
- Nonlinear Estimation and Classification Workshop (2001), Mathematical Sciences Research Institute, Berkeley, California, USA. Presentation given on Aspects of stochastic simulation based inference for some mixtures of latent structures.
- Spatial and Computational Statistics Conference (2000), Ambleside, England, United Kingdom, September 2000. Poster presented on Mixtures of Factor Analysers with fixed observed covariates. An EM algorithm treatment.
- Computational Statistics Conference (2000), Utrecht, The Netherlands, August 21-25, 2000. Presentation given on A Markov Chain Monte Carlo (MCMC) Approach to the Bayesian Analysis of Mixtures of Factor Analysers.
- Research Students Conference in Probability and Statistics (2000), Cardiff, Wales, United Kingdom, April 11-14, 2000. Presentation given on "Exploration of the Mixture of Factor Analysers Model".

Ask and it will be given to you; seek and you will find; knock and the door will be opened to you.

Matthew 7:7.

COURSES TAUGHT

- Principles of Statistical Mining (STAT 846) - (I developed the curriculum)
- Regression Analysis I (STAT 841)
- Regression Analysis II (STAT 842)
- Time Series Analysis and Forecasting (STAT 773) - (I developed the curriculum)
- Principles of Statistical Mining (STAT 747) - (I developed the curriculum)
- Applied Multivariate Statistical Analysis (STAT 756)
- Fundamentals of Statistical Theory (STAT 731) - (I developed the curriculum)
- Statistical Theory I (STAT 721)
- Statistical Theory II (STAT 722)
- Regression Analysis (STAT 741)
- Nonparametric Statistics and Bootstrapping (STAT 753)
- Principles of Applied Statistics (STAT 714)
- Capstone for MS in Applied Statistics (STAT 795)
- Statistics for Data Mining (STAT 702)
- Computational Statistics (Special Topics: STAT 738) - (I developed the curriculum)
- Probability and Statistics for Engineers and Scientists I (STAT 361)
- Probability and Statistics for Engineers and Scientists II (STAT 362)
- Probability and Statistics for Engineers and Scientists I (STAT 251)
- Probability and Statistics for Engineers and Scientists II (STAT 252)
- Statistics for Engineers (STAT 315)

COMMITTEE ACTIVITIES

- Member of the SMS Strategic Planning Committee.
- Member of the Graduate Statistics Admissions Committee.
- Chair of the Statistics Tenure Track Search Committee (Spring 2017).
- Chair of the Statistics Tenure Track Search Committee (Fall 2018).
- Chair of the Statistics Tenure Track Search Committee (Spring 2018).
- Member of the SMS Graduate Committee.
- Member of the RIT Global TaskForce Committee.
- Member of the Graduate Statistics Scheduling Committee.
- Member of the College of Science Statistics Committee.
- Member of the Search Committee for hiring the Head of Industrial Engineering Department.
- Member of the Search Committee for hiring Tenure Track Imaging Science Faculty.
- Member of the Campus-wide (College of Science and College of Computing and College of Engineering committee for designing the MS in Data Science.

OTHER ACTIVITIES

- Sep 2011 - Present, Certified Soccer Coach, Rochester District Youth Soccer League, Rochester, New York, USA.
- Sep 2006 - May 2009, Certified Soccer Coach, American Youth Soccer Organization (AYSO), Grand Blanc, Michigan, USA.
- Sep 2004– June 2006, Soccer Assistant Coach and Coach, Far East Recreational Center, Columbus, Ohio, USA.
- Oct 1999 – Oct 2000, Department of Statistics, University of Glasgow, United Kingdom, Postgraduate Students Representative, sitting on Staff-Students committee.
- Jan. 2000, Founder and Moderator of the International Forum "Forces of Africa" Glasgow, United Kingdom.
- Apr. 98 - Sep. 98, Founder and Chairman of the Meditation Society, Aston University Birmingham, United Kingdom.
- Jan. 91 - Dec. 92, Founder and Chairman of the Junior Enterprise for Computing and Data Processing, Faculty of Science University of Yaoundé, Cameroon.
- Dec. 84 - May 86, Founder and Chairman, English Club (Co-ordination of Activities), Francois Xavier Vogt High School Yaoundé, Cameroon.