# Bahaeddine Taoufik

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## Education

- Ph.D., Statistics, The Pennsylvania State University December 2016
- M.Sc., Statistics, Sorbonne University, Campus Pierre and Marie Curie, Paris VI September 2004
- B.Sc., Mathematics, Sorbonne University, Campus Pierre and Marie Curie, Paris VI June 2001

## **Current Position**

 Assistant Professor of Mathematics, Saint Joseph's University, Pennsylvania.
 Fall 2019 to present

## Other Professional Position(s)

- Assistant Professor of Data Science and Statistics, University of Lynchburg, Virginia.
   Fall 2017 to Summer 2019
- Full Time Lecturer of Statistics (Management Systems), Gabelli School of Business (Graduate Program) Fordham University, New York.

Fall 2016 to Summer 2017

## Manuscripts

- (with P. Kokoszka, H. Miao and M. Reimherr) "DYNAMIC FUNCTIONAL REGRESSION WITH APPLICATION TO THE CROSS-SECTION OF RETURNS", *Journal of Financial Econometrics*, Volume 16, Issue 3 (2018), 461-485.
- (with M. Reimherr and B. K. Sriperumbudur)" OPTIMAL PREDICTION FOR ADDITIVE FUNCTION-ON-FUNCTION REGRESSION", *Electronic Journal of Statistics*, Volume 12, Number 2 (2018), 4571-4601.

## Grants and Awards

- William Harkness Graduate Student Travel Award to attend the Joint Statistical Meetings 2015. Awarded by the Department of Statistics, Pennsylvania State University.
- Department of Mathematics at Columbia University Travel Award to attend the Stochastic Portfolio Theory and Related Topics, New York City , New York, May 8-9, 2015.
- American Statistical Association (ASA) Graduate Student Travel Award to attend the Joint Statistical Meetings 2014.

### Conferences

#### Presentation

• Joint Statistical Meeting (JSM), Denver, CO.	August	2019
• Joint Statistical Meeting (JSM), Baltimore, MD.	August	2017
• Joint Statistical Meeting (JSM), Seattle, WA.	August	2015
• Applied Stochastic Models and Data Analysis (ASMDA). Piraeus, Greece.	July	2015
• Stochastic Portofolio Theory and Related Topics, New York City, NY.	May	2015
Poster		
• John W. Tukey's 100th birthday with a special conference, Princeton University.	e <b>ptember</b>	2015
• Rao Prize Conference, Department of Statistics, Pennsylvania State University.	May	2015
Attendance		
• Shenandoah Undergraduate Mathematics and Statistics Conference, Harrisonburg, VA.	October	2018
• The 50 <sup>th</sup> Celebration Conference of the Statistics Department at Penn State University, State College, PA.	May	2018
• National Conference of Teachers of Mathematics, Washington, D.C.	A pril	2018
• The Mathematical Association of America, Newport, VA.	ovember	2017
• Shenandoah Undergraduate Mathematics and Statistics Conference, Harrisonburg, VA.	October	2017
• 11 th World Congress of the Econometric Society, Montreal, Canada.	August	2015
• United States Conference On Teaching Statistics (UCOTS), State College, PA. (Partcipation in the focus group session for Graduate Teaching Assistants in Statistics).	May	2015
• Joint Statistical Meeting (JSM), Boston, MA.	August	2014
• Nonparametric Statistics for Big Data, Madison, WI.	June	2014

### **Research Interests**

• Functional Data Analysis, High Dimensional Data, Nonparametric Regression, Kernel Methods, Spline Smoothing, Functional Time Series, Nonlinear Functional Regression, Forecasting Models.

### Mentoring Research Experience

#### University of Lynchburg (Undergraduate Level)

- Ian Campbell: "Analysis of 2016-17 MLS Season Data Using Poisson Regression with R."
- Elisabeth Yarmy: "Predicting Olympic Medal Counts Using Zero-Inflated Negative Binomial Regression."

#### Gabelli School of Business at Fordham University (Graduate Level)

• Sumi Chahaduri: "Time Series Regression to Predict Unemployment Using Economic and Political Factors."

## **Research Experience**

### Statistical Consulting

Two semesters (9 months) as a required practice course at the Statistical Consulting Center at Pennsylvania State University. Work on different projects (with real datasets) from different areas.

• Entomology (ANOVA-R).	Spring 2013
• Germanic and Slavic languages (Power Analysis- Minitab).	Spring 2013
• Education (Hierarchical Linear Modeling-SPSS).	Spring 2013
• Agriculture (Repeated Measure ANOVA- SAS).	Spring 2012
• Communication Sciences and Disorders (Multidimensional scaling-	SPSS). <i>Spring 2012</i>
Relevant Experience	
<ul> <li>Graduate research assistant in Computational Mechanics         <ul> <li>Department of Computational Engineering</li> <li>Mississippi State University</li> </ul> </li> </ul>	August 2007- August 2009
Internships	
<ul> <li>AXA insurance (actuarial and financial section), Paris, France.</li> <li>Accounting-Control of Mathematical Provisions.</li> </ul>	May 2004-September 2004
Teaching Experience	
University of Lynchburg (Department of Mathematics)	
Assistant Professor (Graduate and Undergraduate -Level Cours • STAT 333: Mathematical Statistics	ses) Fall 2017 to present
$\circ$ MATH 311: Introduction to Probability Theory	
$\circ$ STAT 302: Statistical Inference	
$\circ$ STAT 300: Data Science & Applied Statistics	
$\circ$ STAT 222: Concepts of Statistics	
Fordham University (Gabelli School of Business)	
<b><u>Full Time Lecturer</u></b> (Graduate- Level Courses)	Fall 2016 to Summer 2017
$\circ$ SDGB 7844: Statistics Methods & Computation	
$\circ$ DGGB 7850: For ecasting Models	
$\circ$ DGGB 6830: Statistics & Decisions (MBA)	
$\circ$ DGGB 6820: Statistics (MBA)	
Pennsylvania State University (Statistics Department)	
Instructor (Undergraduate- Level Courses)	Summer 2012-Summer 2015
$\circ$ Stat 414: Introduction to Probability Theory (online course)	
$\circ$ Stat 318: Elementary Probability	

- Stat 200: Elementary Statistics
- Stat 100: Statistical Concepts and Reasoning

Teaching Assistant (Graduate and Undergraduate - Level Courses) Fall 2010 to Summer 2016

- Stat 500: Applied Statistics (Graduate)
- $\circ$  Stat 418: Introduction to Probability and Stochastic Processes
- $\circ$  Stat 414

• Stat 414 (Online course)

- $\circ$  Stat318
- $\circ$  Stat 250: Introduction to Biostatistics
- Stat 240: Introduction to Biometry
- $\circ$  Stat 200

#### Mississippi State University (Mathematics and Statistics Department)

#### Instructor

MA 2113: Introduction to Statistics

#### Les Cours Legendre (Private Tutoring Service)

Private tutor in Mathematics and Statistics

Conducted individualized and group tutoring sessions in mathematics and statistics for university and secondary school students at "Les Cours Legendre" (private tutoring service), Paris, France.

### **Editorial Duties**

• Referee/Reviewer: Econometrics and Statistics

### **Professional Organizations Membership**

- Isolated Statisticians (IsoStat)
- ASA: American Statistical Association
- Pi Mu Epsilon (PMU)

### Student's Awards and Accomplishments Under My Supervision

- Ian Campbell: Winner of the Undergraduate students poster for the 2018 Student Scholar Showcase. (University of Lynchburg). *April 2018*
- Ian Campbell: Received the 2017-2018 Director's Award for the best thesis by the Westover Honors Fellow. (University of Lynchburg). May 2018
- Elisabeth Yarmy: Pi Mu Epsilon (PMU) Undergraduate Student Travel Award to present a research work at the Mathematical Association of America (MAA) Conference, Denver, CO. *August 2018*

Fall 2009-Spring 2010

September 2004 - July 2007

## Department and University wide Committees/Service

### University of Lynchburg

• Equity Advocate for the office of Equity and Inclusion

### Pennsylvania State University

• Graduate student representative in the Committee of Climate and Diversity for the Eberly School of Science and for the Department of Statistics. September 2014 - September 2015

### Mississippi State University

• Vice president of the African Student Association (ASA).

## Computing Languages

- Excellent knowledge in R and Matlab.
- Experienced using SPSS, SAS and Minitab.

## Languages

- English (Fluent)
- French (Fluent)
- Arabic (Fluent)
- Italian (Conversational)

October 2018 to present

September 2009 - July 2010