

## EDUCATION

Jackson	University of Mississippi-Medical Center	Aug 2018 -
<ul style="list-style-type: none"><li>• <b>Graduate Fellow Student in Biostatistics and Data Science</b></li></ul>		
Columbia	University of Missouri	Aug 2011-Jul 2016
<ul style="list-style-type: none"><li>• <b>Ph.D. in Mathematics</b></li></ul>		
Selected Courses in Statistics		University of Mississippi-Medical Center
		Fall 2018-
<ul style="list-style-type: none"><li>• <b>Analytics: Apply Statistics/Generalized Linear Regression to understand health problems from Jackson Heart Study data.</b></li><li>• <b>Statistical Computing: Using R/Stata/SAS to conduct inference in health problems</b></li><li>• <b>Machine Learning: From mathematical theory to its applications in health science.</b></li><li>• <b>Statistics: Advance Theory of Statistics Inference</b></li><li>• <b>Survival Analysis: Theory and Applications</b></li><li>• <b>Spatial-temporal analysis</b></li><li>• <b>Statistical Consultant</b></li><li>• <b>Genome-wide association study (GWAS)</b></li></ul>		

## HORNER AND AWARDS

Jackson	Mississippi	Aug 2018-
<ul style="list-style-type: none"><li>• <b>Graduate Fellowship with full tuition and stipend support for 5 years</b></li></ul>		
Columbia	Missouri	Aug 2011- Jul 2016
<ul style="list-style-type: none"><li>• <b>Graduate Teaching/Research Assistant with full tuition and stipend support for 5 years</b></li><li>• <b>Highest scores for Ph.D Analysis Qualifying Exams in Mathematics – Spring 2011</b></li><li>• <b>Invited to Hausdorff Research Institute for Mathematics, Bonn, Germany, for one month with full support– May 2014</b></li><li>• <b>Graduated with highest GPA among 150 students in Mathematics.</b></li></ul>		
Syracuse University	New York	Aug 2016-May 2018
<ul style="list-style-type: none"><li>• <b>Putnam coach for Mathematics team (<i>my student got ranked 59<sup>th</sup> for all students across US and Canada</i>)</b></li></ul>		

## EMPLOYMENT

SYRACUSE UNIVERSITY	SYRACUSE, NY	AUG 2016 – MAY 2018
<ul style="list-style-type: none"><li>• Postdoctoral Researcher In Mathematics</li></ul>		

## TEACHING EXPERIENCE

Syracuse University	Syracuse, NY	Aug 2016 – May 2018
<ul style="list-style-type: none"><li>• Calculus II, III; Partial Differential Equations</li></ul>		

## PROJECTS IN DATA SCIENCE AND MEDICAL HEALTH SCIENCE (IN PROGRESS AND FINISHED)

1. [Image rotation and Convolution Neural Network for MNIST dataset](#)
2. [UTHSC/TU/UMMC CORNET](#)
3. **Effect of disparities on continuity and healthcare utilization among patients with obesity-associated chronic conditions (OCC) and the subgroup with diabetes (OCC+T2D) (first author, in progress)**
4. **Continuity of Care for Patients with Obesity-Associated Chronic Conditions: Protocol for a Multisite Retrospective Cohort Study, JMIR Res Protoc 2020;9(9):e20788**
5. **Proteomic Analysis for egg proteins (*in progress*)**
6. **GWAS for soybean data analysis (*in preparation*)**
7. [Some Observations of Gastric Cancer from SEER database \(first author, in preparation\)](#)
8. **Disparities of geography, economy, education, and uninsured rate on COVID19 cases and deaths in Mississippi (first author, submitted)**

- 1) Uniform Rectifiability and harmonic measure IV: Ahlfors regularity plus Poisson kernels in  $L^p$  implies uniform rectifiability, with Steve Hofmann, Kaj Nystrom, Jose Maria Martell, Analysis and PDEs. Vol 10. No. 3 2017
- 2) BMO solvability and absolute continuity of harmonic measure, with Steve Hofmann, The Journal of Geometric Analysis, Volume 28, Issue 4, pp 3278–3299
- 3) Carleson measure estimates and the Dirichlet problem for degenerate elliptic equations, with Steve Hofmann and Andrew Morris, ANALYSIS & PDE, Volume 12, No. 8, 2019
- 4) Nonlinear versions of Stampacchia and Lax-Milgram theorems and applications, with Duong M. Duc and Nguyen H. Loc, Nonlinear Anal. 68 (2008), no. 4, 925931
- 5) Sharp Trudinger-Moser inequalities with homogeneous weights, with Duy, Nguyen Tuan; Nghia, Le Trung; Electron J. Differential Equations 2019, N. 205
- 6) Hardy Inequalities and Caffarelli-Kohn-Nirenberg inequalities with radial derivative, with Nguyen Tuan Duy, Weijia Yin , 2020 Journal of Mathematical Inequalities, to appear

---

**Languages and Technologies**

- C/C++ ; SQL; SAS; R; Python; STATA; Julia (Beginning); Linux;Windows;MacOS
- Bioconductor: DESeq2, limma, EdgeR, rTANDEM