

Contact Information	Department of Mathematics Oberlin College Severance Hall, 120 W Lorain St. Oberlin, OH 44074, USA	<i>Office:</i> 224 <i>Phone:</i> (956) 624-3574 <i>E-mail:</i> zmohamed@oberlin.edu
Education Background	University of Nebraska-Lincoln (UNL) PhD. in Statistics • <i>GPA:</i> 3.94 /4.00	2018-2023
	University of Texas Rio Grande Valley (UTRGV) Master's degree in Mathematics and Statistics • <i>GPA:</i> 4.00 /4.00	2015-2017
	Kuwait University , Kuwait Master's degree in Statistics and Operations Research • <i>GPA:</i> 3.77 /4.00	2005-2010
	Cairo University , Egypt B.Sc. in Statistics, (minor: Computational Socio-Sciences)	1997-2001
Professional Experience	07/2023-present Oberlin College 08/2018-2023 University of Nebraska-Lincoln 04/2018 Continuing Education UTRGV 08/2017-07/2018 University of Texas Rio Grande Valley 06/2015-05/2017 University of Texas Rio Grande Valley 10/2009–05/2014 Public Authority for Applied Education 08/2004-05/2015 Kuwait Ministry of Education	Assistant Professor TA P-Time Lecturer F-Time Lecturer TA P-Time Lecturer C.S Teacher
Courses Taught	2019-2022 Introduction to Statistics, STAT 218 (Full Instructor) Spring 2019 Design and Analysis of Research Studies, STAT 802 (TA) Fall 2018 Statistical Methods in Research, STAT 801 (TA) Summer 2018 Elementary Statistical Methods (Lecturer) Spring 2018 Precalculus, College Algebra, GRE (Lecturer) Fall 2017 College Algebra, Math for business, Elementary Statistical Methods (Lecturer) 2015-2017 Calculus II, Precalculus, College Algebra, Elementary Statistical Methods, Intermediate Algebra (TA) 2009-2014 Applied statistics I, Biostatistics, Elementary Statistics (Lecturer)	

Publications	<p>Mohamed Z., Guan Y. (2022). Data Fusion Methods For Air Quality Measurements. In progress.</p> <ul style="list-style-type: none"> • Mohamed Z., Guan Y., Zhou Y. (2022). SPDE Model For Massive Data Invasive Trees. In progress. • Oraby T, Tyshenko MG, Balkhy HH, Tasnif Y, Quiroz-Gaspar A, Mohamed Z., Araya A, Elsaadany S, Al-Mazroa E, Alhelail MA, Arabi YM, Al-Zoughool M (2020). Analysis of the Healthcare MERS-CoV Outbreak in King Abdulaziz Medical Center, Riyadh, Saudi Arabia, June-August 2015 Using a SEIR Ward Transmission Model. • Mohamed, Z. & Oraby, T. (2017). Multi-Type Branching Processes Modeling of Nosocomial Epidemics. Stochastic and Quality Control, 32(2), pp. 63-75. Retrieved 11 Dec. 2017, from doi:10.1515/eqc-2017-0026. • Al-Awadhi, F., Konsowa, M., and Najeh, Z. (2009) Commute times and the effective resistances of random trees. Probability in the Engineering and Informational Sciences, 23(4): 649-660.
Conferences and Presentations	<p>10/2022 Women in Statistics and Data Science Conference “Data Fusion Methods For Air Quality Measurements”</p> <p>04/2017 Sixth Annual Statistics Day Texas A&M – Kingsville, TX. “Multi-Type Branching Processes Modeling of Nosocomial Epidemics”</p> <p>05/2009 Department Seminar “Commute Times and the Effective Resistances of Random Trees”</p>
Workshops	<p>08/2018 “Teaching Assistant Training” at UNL.</p> <p>09/2018 “Presenting Research To The Public” at UNL.</p> <p>09/2018 “Assessment” Motivating and revealing student thinking at UNL.</p> <p>04/2018 3rd Teaching Development & Teaching-Related Research Workshop. “Kagan Strategies in the Classroom”</p> <p>04/2015 District Teaching Workshop “Effective Learning & Technologies”</p>
Projects	<p>03/2020 Statistical Cross-disciplinary Collaboration and Consulting Lab: “Impact of Manure and Cedar Mulch Land Application on Agronomic and Soil Health Variables in Corn Production Systems”</p> <p>12/2020 Statistical Cross-disciplinary Collaboration and Consulting Lab: “Nitrogen Management in Irrigated Corn using Crop Sensor and Crop Model via Fertigation”.</p> <p>04/2018 UTRGV Engaged Scholar Symposium (ES2). “Ticks in Texas”. (Collaboration)</p>
Posters	<p>10/2022 Women in Statistics and Data Science Conference “Data Fusion Methods For Air Quality Measurements”</p> <p>05/2018 UTRGV Engaged Scholar Symposium (ES2). “Ticks in Texas”. (Collaboration)</p>

Achievements	02/2022	Top 31%, Kaggle Competition, “Nature never goes out of style!”
	02/2021	Rank 5, Model Inference (1a), KAUST Competition on Spatial Statistics for Large Datasets.
	03/2021	Rank 8, Model Prediction (1b), KAUST Competition on Spatial Statistics for Large Datasets.

**Certificates for
Addition**

In-Person &

Online Courses

- Supervised Machine Learning, Stanford University.
- AI Advanced Learning Algorithm, Stanford University.
- Unsupervised Learning, Recommenders, Reinforcement Learning, Stanford University.
- Rcpp (R and C++), National Institute of Statistical Sciences.
- Spatial Statistical Learning, ISI.
- Large-Scale Spatial Data Science, ISI.
- Spatial and Spatio-Temporal Point Processes and Beyond, OSSP.
- SQL, Saudi Federation for Cybersecurity, Programming & Drones, Satr.Codes.
- Python for Data Analytics and Machine Learning Bootcamp.
- Bayesian statistics, University of California.
- Learning How to Learn, UC San Diego
- SPSS, Public Authority for Applied Education and Training, Kuwait.
- R, Scientific Research Center and Initiative Group, Egypt.
- Cooperative Learning Strategies Using Kagan Structures.
- International Computer Driving License (ICDL), Kuwait.
- Advanced Microsoft office word & excel, Kuwait.

Awards

and Honors

Fall 2022	David H. and Annie E. Larrick Graduate Student Travel Award
Spring 2017	The Outstanding International Student Scholarship, UTRGV
2016-2017	Dr. Miguel Paredes Endowed Scholarship, UTRGV Nobel Laureate S. Chandraeskha Scholarship, UTRGV Margaret Draper Scholarship, UTRGV
2015-2016	Presidential Graduate Scholarship, UTRGV
2009-2015	Excellence Teaching Award, Kuwait Ministry of Education.

Academic

Public Services

Fall 2021	Tutoring in William H. Thompson Scholars Learning Community lab in UNL for undergraduate.
Spring 2018	Math tutoring for elementary, middle and high-school students in the Islamic Community Center, Tx.

**Software and
Programming**

Languages

R
SAS
Python
Matlab
SQL
L^AT_EX, Office(Word, Excel, Powerpoint)