

NERMINE EL SISSI
Sabanci University, Lojman B-23
Orta Mahalle, 34956
Tuzla, Istanbul, Turkey
Tel. +905419403698
nelsissi@gmail.com

Educational History

- Ph.D., August 2006, University of Texas at Dallas, Richardson, TX, Applied Mathematics
 - Dissertation Title: “Positive Definite Kernels and Lattice Paths”
- Master of Science, December 2003, University of Texas at Dallas, Richardson, TX, Applied Mathematics
- Bachelor of Arts, May 2002, Pace University, New York, NY, Mathematics

Professional Experience

- Bahcesehir University, Istanbul, Turkey, Instructor
 - Teaching
 - Calculus I
 - Calculus II
 - Probability and Statistics
 - Linear Algebra
 - Academic Services
 - Coordinate multi-section Calculus courses
- Sabanci University, Istanbul, Turkey, Part-time instructor in Foundation Development Directorate, 2018-Present
 - Coordinate Calculus I and II courses
 - Train Teaching Assistants in the Calculus I and II courses
 - Develop workshops on effective teaching for the undergraduate Learning Assistants
- American University in Cairo, Egypt, Assistant Professor, 2010-2018
 - Teaching:
 - Calculus I
 - Calculus II
 - Linear Algebra
 - Differential Equations
 - Complex Functions
 - Graph Theory
 - Real Analysis I
 - Real Analysis II
 - Matrix Analysis

- Committee and Academic Services:
 - University
 - Senate Member
 - University Budget Advisory Committee
 - Strategic Planning Committee
 - Common Reading Program Selection Committee
 - School
 - Conference and Retreat Committee
 - Mission and Strategic Plan Committee
 - Advisory Board Event Planner Committee
 - Department
 - Ad Hoc Assessment Review Committee
 - Math Awareness Activities
 - Evaluation of Teaching Assistants Committee
 - Calculus Catalogue Changes Committee
 - Departmental Logo Committee
 - Mission and Strategic Plan Committee
 - Mathematics Major Advising
 - Professional
 - German Academic Exchange Service (DAAD) selection Committee
 - Referee for PRIMUS
- University of Texas at Dallas, Senior Lecturer, 2009-2010
 - Teaching:
 - College Algebra
 - Calculus I
 - Calculus II
 - Applied Calculus I
 - Applied Calculus II
 - Committee and Academic Services:
 - Member of the Innovative Teaching & Course Interaction Committee.
 - Applied Calculus II course coordinator.

- Trinity (Washington) University, Washington, DC, Clare Boothe Luce Assistant Professor of Mathematics, 2006-2009
 - Teaching:
 - College Algebra
 - Finite Mathematics
 - Calculus I
 - Introductory Statistics
 - Multivariate Statistics
 - Real Analysis
 - Committee and Academic Services:
 - Member of the Professional Development and Scholarship Committee.
 - Organized and conducted freshmen orientation workshops on applications of mathematics and statistics.
 - Organized a workshop on “Mathematics and the Climate” in The Math Awareness Month (2009).
 - Learning Community advisor: advised freshmen students, followed-up on their academic progress and their first year college experience as well as their academic progress in the subsequent years.
- Marymount University, Arlington, VA, Adjunct Professor, Adjunct Professor, 2009.
 - Teaching:
 - Introduction to Mathematical Solving
 - Finite Mathematics
 - Statistics
- UTD Mathematical Sciences Department, Graduate Teaching Assistant, 2002-2006
 - Taught Problem Solving Sessions for the Calculus I and II undergraduate courses.
- Pace University, New York, NY, Tutor 1999-2002,
 - Tutored undergraduate level courses in College Algebra, Calculus I, Calculus II, Calculus III, Linear Algebra, Finite Mathematics, Discrete Mathematics, and Differential Equations.
 - Tutored French for beginner and advanced college levels.
 - Tutored Spanish for beginner and intermediate college levels.

Research Interests

matrix analysis, orthogonal polynomials, combinatorics, and mathematics education.

Publications and Book Reviews

- *Evaluation of Gaussian Hypergeometric Series Using Huff's Models of Elliptic Curves* co-authored with Mohammad Sadek, Arman Shamsi Zargar and Naser Zamani), The Ramanujan Journal, 48(2) (2019), pp.357-368.
- *A Combinatorial Interpretation of the LDU Decomposition of Totally Positive Matrices*, co-authored with M. El Gebali, Glasnik Matematički, 53(73)(2018), pp.51-71.
- *On Large F-Diaphontine Sets*, co-authored with M. Sadek appeared in Monatshefte für Mathematik, 186(4) (2018), pp. 51-71, pp.703-710.
- *“New Hypergeometric Connection Formulae between Fibonacci and Chebyshev Polynomials,”* co-authored with W. M. Abd-Elhameed, Y. H. Youssri, and Mohammad Sadek, The Ramanujan Journal, 42 (2017), pp. 347-361.
- *“Partitions with Equal Products and Elliptic Curves,”* co-authored with Mohammad Sadek, Osaka Journal of Mathematics, 52(2) (2015), pp. 515-525.
- *“Edwards Curves and Gaussian hypergeometric series,”* co-authored with Mohammad Sadek, Journal de Théorie des Nombres de Bordeaux, Volume 28, Number 1 (2016), 115-124.
- *“Positive Definite Kernels and Lattice Paths,”* co-authored with Tiberiu Constantinescu, Houston Journal of Mathematics, 33 (1) (2007), pp. 285-300.
- *“Tensor Algebras and Displacement Structure IV,”* co-authored with Troy Banks and Tiberiu Constantinescu, Linear Algebra and its Applications, 405 (2005), pp. 83-103.
- Book Review: *Math in Action*, Pearson Education

Talks and Presentations

- The Characterization of Positive Definite Kernels via Operators Models.”
(Invited talk at Texas A&M, Qatar, 2014)
- “Students’ Learning Journey in Linear Algebra.”
(MAA MathFest 2013, Hartford, CT)
- “Calculus Across the Atlantic.”
(MAA MathFest 2012, Madison, WI)
- “Implementing Learning Community Research Themes to Achieve More Inclusive Science Curricula.”
(Inclusive Science, St. Paul 2008)
- “On the Parametrization of Positive Definite Kernels and their Combinatorial Interpretation.”
(Texas A&M, 2007)
- Positive Definite Kernels and Lattice Paths.”
(Great Plains Operator Theory Symposium, 2005)
- “Selected Topics on Sierpinski and Pascal Triangles.”
(Annual Meeting of the Society of Fellows of Dyson College of Arts and Sciences, Pace University 2002)

Awards and Fellowships

University of Texas at Dallas

- Awarded merit-based teaching assistant scholarships at the University of Texas at Dallas since fall 2002 to Summer 2006
- Nominated for the Teaching Assistant award (2006)

Pace University

- Departmental Award in mathematics for the class of 2002
(Prize awarded annually to the top mathematics student)
- Pace Trustee Scholarship
(Prize awarded in recognition of outstanding academic performance)
- Best student of the year in French for the year 2000-2001
- National Dean’s List (2000-2001 and 2001-2002)
- Member of the Math Honor Society (Kappa Mu Epsilon)
- Member of the French Honor Society (Pi Delta Phi)