

Manizheh Nafari, Ph.D.

Dept. of Mathematics & Computer Science Phone: 937-376-6365
Central State University Email: mnafari at centralstate.edu
Wilberforce, OH 45384 manizhehnafari.wordpress.com

Education:

Ph.D. in Mathematics, University of Texas at Arlington (UTA), USA, 2007-2011
M.Sc. in Mathematics, Tarbiat Modarres University, Iran
B.Sc. in Mathematics, Sharif University of Technology, Iran

Professional Experience:

08/2016 – Present: Assistant Professor, Dept. of Mathematics and Computer Science (MCS), Central State University (CSU), Wilberforce, Ohio
08/2013 – 07/2014: Visiting Assistant Professor, Dept. of Mathematical Sciences, DePaul University, Chicago, Illinois
08/2012 – 05/2013: Visiting Assistant Professor, Dept. of Mathematics and Statistics, University of Toledo, Toledo, Ohio
01/2012 – 08/2012: Adjunct Faculty, Tarrant County College Southeast Campus, Arlington, Texas
08/2011 – 08/2012: Adjunct Faculty, Dept. of Mathematics, University of Texas at Arlington, Arlington, Texas
08/2007 – 08/2011: Graduate Teaching and Research Assistant, Dept. of Mathematics, University of Texas at Arlington (UTA), Arlington, Texas

Research Interest:

Noncommutative Algebra, Noncommutative Algebraic Geometry

Publications:

M. Nafari and M. Vancliff, Graded Skew Clifford Algebras that are Twists of Graded Clifford Algebras, Communications in Algebra, Vol. 43, pp. 719 – 725, 2015
M. Nafari, M. Vancliff, and J. Zhang, Classifying Quadratic Quantum P^2 s By Using Graded Skew Clifford Algebras, Journal of Algebra, Vol. 346, pp. 152-164, 2011

Preprints:

M. Nafari, Geometry of Regular Algebras of Global Dimension 4 related to Graded Skew Clifford Algebras of Global Dimension 3, arXiv:2209.02818, 2022

M. Nafari, Introduction to Noncommutative Algebraic Geometry, arXiv:1502.07988, 2015

In Preparation:

M. Nafari and Doria S. Lee, A Topological Space with its Properties

M. Nafari, Line Schemes of some Regular Algebras

Grants:

“STEM Innovation and Marauder Honors Scholarships (SIMHS)”, The Ohio Department of Higher Education (ODHE), June 2022, Funded, \$718,272 -- **PD**

“The Bridge to Success through Academic Retention (BeSTAR)”, US Department of Education: Minority Science and Engineering Improvement Program (MSEIP), July 2021, Not Funded, \$749,993 -- **PI**

“Center for Research in Rural Economic Development (CRRED)”, USDA-NIFA, April 2020, Not Funded, \$500,000 -- **Co-PI**

“Choose Ohio First for Computer Science & related areas”, The Ohio Department of Higher Education (ODHE), 2020-Present, Funded, \$207,433.84 -- **PD**

“Advancement of Instruction in Quantitative Reasoning Course (AIQRC)” with Project Read of Sinclair Community College, NSF-IUSE, December 2019, Not Funded, \$428,528 -- **PI**

Grant Writing:

Technical Assistance Scholar, Minority Business Development Agency (MBDA) Project entitled, “Technical Assistance Workshops for HBCUs to compete for Federal Research and Development Funds”: sponsored by South Carolina State University, received a certificate, Summer 2019

- 1) The Southern/Central Regional Technical Assistance Workshop for HBCUs, Biloxi, MS
- 2) The National Sponsored Program Administrator Alliance of HBCUs (NSPAA-HBCUs) Technical Assistance Workshop, Montgomery, AL
- 3) Faculty Exchange I, Savannah River National Laboratory, Aikens, SC
- 4) Faculty Institute, presented the grant “Improving Mathematics for Quantitative Reasoning Students”, South Carolina State University, Orangeburg, SC

Awards:

Leader Minigrant Recipient (for STEM Female Faculty), Central State University, Summer 2017

Several NSF Travel Awards, 2010-2019

Mathematical Sciences Research Institute (MSRI) Travel Award, January-February 2013

Association for Women in Mathematics (AWM)-NSF Travel Grant, 2012

Graduate Dean Doctoral Fellowship, UTA, 2007-2011

STEM Doctoral Fellowship, UTA, 2007-2011

Selected Conference Presentations:

(Regular) Graded Skew Clifford Algebras of Low Global Dimension, Department of Mathematics and Statistics Colloquium, Wright State University, March 31, 2017

(Regular) Graded Skew Clifford Algebras of Low Global Dimension, Department of Mathematics Colloquium, University of Dayton, October 27, 2016

Artin-Schelter Regular Graded Skew Clifford Algebras that are Twists of Artin-Schelter Regular Graded Clifford Algebras, 2nd Annual Midwest Women in Mathematics Symposium, University of Notre Dame, Notre Dame, April 5, 2014

Poster "Regular Graded Skew Clifford Algebras that are Twists of Regular Graded Clifford Algebras", Connections for Women: Noncommutative Algebraic Geometry and Representation Theory, MSRI, Berkeley, January 23-25, 2013

Regular Graded Skew Clifford Algebras of Low Global Dimension, Joint Mathematics Meetings 2012, Boston, January 4-7, 2012

Graded Skew Clifford Algebras that are Twists of Graded Clifford Algebras, Joint Mathematics Meetings 2012, January 4-7, 2012

Constructing Quadratic Quantum P2s from Graded Skew Clifford Algebras, Joint Mathematics Meetings 2011, New Orleans, Louisiana, January 6-9, 2011

Posters "Examples of Graded Skew Clifford Algebras 1" and "Examples of Graded Skew Clifford Algebras 2", New Trends in Noncommutative Algebra: A Conference in Honor of Ken Goodearl's 65th Birthday, University of Washington, Seattle, August 9-13, 2010

Pi History, Mathematical Association of America (MAA) Celebration of Pi Day, University of Texas at Arlington, March 14, 2008.

Organizer of the Workshop "Geometry Course Ware" with Y. Tabesh and V. Momtaheni, Third Annual Iranian Mathematics Education Conference, Kerman University, Kerman, Iran, 1998

Undergraduate Research Students:

-**Doria S. Lee**, The Louis Stokes Alliances for Minority Participation (LSAMP) Research Student, 2019- December 2021

"A Topological Space with Its Properties", LSAMP Research 2020- December 2021:

-Spring 2021 Ohio LSAMP Student Research Symposium, Virtual, April 1, 2021

-NAM (National Association of Mathematicians) Undergraduate MATHFest XXX, Virtual, October 9-10, 2020

"Schrödinger (Time-Dependent) Wave Equation", LSAMP Research Academic Year 2019-2020:

-IN (Indiana) LSAMP 2020 Annual Research Conference, Virtual, October 3, 2020

-2020 Ohio LSAMP Conference, Virtual, November 13, 2020

"Cardinal Numbers & Aleph Null", Undergraduate Mathematics Day, University of Dayton, November 2, 2019

Doria S. Lee was the recipient of the CSU 2020 Student Research Award.

-**Tristin Fernandes**: "Exploring the Collatz Conjecture": Exploring old and new methods to find results related to the Collatz conjecture, In-Course Honors Project for MTH3521, Fall 2021.

-**Anyla C. Demmons** (graduated May 2019): "Algebraic Geometry Project ": Finding varieties of some algebraic structures, using Mathematica to evaluate and graph the varieties}, Fall 2018 and Spring 2019.

-**Bakari-Akil Levy** (graduated May 2018): "Algebraic Coding Theory Project: Binary Code (6,3)" {generating linear binary code (6,3), Decoding received words using the parity-check matrix method, and Coset decoding using a standard array}, Spring 2018.

-**Marshall D. Mullins** (graduated May 2018): "Algebraic Coding Theory Project: Binary Code (7,4)" {generating linear binary code (7,4), Decoding received words using the parity-check matrix method, and Coset decoding using a standard array}, Spring 2018.

Courses Taught:

Central State University: (Capstone Course) Selected Topics in Mathematics: Introduction to Topology, (Mathematics Writing Course) Mathematical Writing/Research, Abstract Algebra II, Abstract Algebra I, Foundations in Mathematics, Calculus II, Calculus I, Precalculus, Modern Applications of Mathematics

DePaul University: Discrete Mathematics II, Discrete Mathematics I, Business Calculus II, Business Calculus I, Precalculus

University of Toledo: Introduction to Abstract Algebra, Calculus I-Engineering Tech, Calculus I-for Life Sciences with Applications, College Algebra

Tarrant County College-Southeast Campus: Trigonometry, GRE Mathematics, Intermediate Algebra, Prealgebra

University Of Texas at Arlington: Precalculus II, Precalculus I, Business Calculus, Trigonometry, College Algebra

Invited Workshops/Conferences:

Ohio LSAMP 2022 Faculty and Staff Mentoring Workshop, Virtual, February 18, 2022

Ohio LSAMP Faculty Mentoring Workshop, Virtual, April 16, 2021

Women in Aviation International 2021 Virtual Conference, March 11-12, 2021

Spring 2021 Ohio LSAMP Student Research Symposium (with Doria S. Lee), Virtual, April 1, 2021

IN (Indiana) LSAMP 2020 Annual Research Conference (with Doria S. Lee), Virtual, October 3, 2020

2020 Ohio LSAMP Conference (with Doria S. Lee), Virtual, November 13, 2020

Resilience During Crisis, 2-day workshop, CSU, June 17 and June 19, 2020

Faculty Workshops on Co-Requisite Math Instruction, Ohio Mathematics Initiative, Columbus State Community College, November 8, 2019

Undergraduate Mathematics Day (with Doria S. Lee and Kayla Lucas), University of Dayton, November 2, 2019

2019 Grace Hopper Celebration of Women in Computing (with Makaya Clarke, Jakara Stewart, and C'Airra Dunson), Orlando, October 1-4, 2019

NAM (National Association of Mathematicians) Undergraduate MATHFest XXIX (with Doria S. Lee), Southern University, September 27-29, 2019

Quantitative Reasoning Faculty Workshops, Ohio Mathematics Initiative, Columbus State Community College, April 25, 2019

Co-Requisite Math Symposium, Ohio Mathematics Initiative, Ohio University-Dublin campus, October 26, 2018

Undergraduate Mathematics Day (with Marshall D. Mullins and Bakari-Akil Levy), University of Dayton, November 11, 2017

Enumerative Geometry, Mirror Symmetry, and Physics, University of Illinois at Urbana-Champaign, Champaign, July 17-21, 2017

Quantitative Reasoning Faculty Workshop on Active Learning, Ohio Math Initiative, Columbus State Community College, March 2-3, 2017

Spring Opportunities Workshop for Women in Mathematical Sciences, University of Tennessee, Knoxville, April 9-11, 2014

Introductory Workshop: Noncommutative Algebraic Geometry and Representation Theory, MSRI, Berkeley, January 28 – February 1, 2013

Teaching Certificates:

Certified Online Course Developer (FOC: Faculty Online Certification Training Program, Modules A (D2L), B (Applying QM Rubric), and C (Teaching with Technology)), CSU, Fall 2022

Quality Matters Certificate (Independent Applying the QM Rubric), CSU, November 23, 2020

Mobile Summer Institute's (MOSI) Certificate for successful completion of Undergraduate STEM Education, CSU, May 21-24, 2018

Center for Instructional Technology Innovation (C.I.T.I.)'s Certificate for successful completion of Teaching with Technology, CSU, Fall 2016

University and Department Committees:

Chair of the Senate Committee on Research and Library-Information Center, CSU, 2021-2022

Member of Computer Science Assistant Professor Search Committee, MCS Department, CSU, Fall 2021

Member of the Department of Mathematics & Computer Science Interdisciplinary Graduate Program, MCS Department, CSU, 2021-2022

Member of University-Wide Retention Committee, CSU, 2020-2021

Member of Senate Committee on Research and Library-Information Center, CSU, 2019-2022

Chair of the Senate Committee on Academic Policy (new academic program request (APR) form, APR template, and protocol for the university), CSU, 2018-2019

Member of Senate Committee on Academic Policy, CSU, 2017-2019

Member of Mathematics Assistant Professor/Instructor Search Committee, MCS Department, CSU, Spring 2017

Member of Internal Mathematics Program Review, MCS Department, CSU, Spring 2017 and Fall 2022

Other Services:

CSU representative in Ohio LSAMP-Mathematics Curriculum Reform Task Force Committee, 2019-Present

Academic Advisor for Mathematics major students, MCS Department, CSU, 2016-Present

Coordinator of Quantitative Reasoning Course (Mathematics course for Non-STEM majors: Modern Applications of Mathematics), CSU, 2016 – 2022

Participated in STEM Success Center (SSC), CSU, 2019-Present

Faculty mentor of student organization “Mathematics & Computer Science Club”, MCS Department, CSU, 2016-2021

Writing Intensive Course Assessments (of Mathematical Writing/Research Course), CSU, Spring 2021

Online Course Developer of Calculus II and Modern Applications of Mathematics, CSU, Spring 2021

Submitted Ohio Transfer 36 (TM011) for Quantitative Reasoning Course (MTH1550), The Ohio Department of Higher Education, Spring 2021

Volunteer Member of Mentor Network of Association of Women in Mathematics, 2012-2020

Facilitated Navy Visit to CSU with Office of Career Services, CSU, March 5, 2020

Facilitated training on “Resources for Math Faculty and Students at CSU (Strong Start to Finish Ohio)” with B. Paudyal, MCS Department, CSU, January 23, 2020

Mathematics Instructor, Seed to Bloom Ag-STEM Institute (rising 6th-8th graders) Summer Camps, Student Assistant: Anyla C. Demmons, CSU, Summer 2018

Facilitated Procter & Gamble (P&G) visit to CSU, CSU, September 20, 2017

Judge for Undergraduate Students' Posters, ACES (Annual Celebration of Excellence by Students), UTA, March 22-23, 2012

Judge for Undergraduate Students' Posters (in Science/Math/Engineering), Louis Stokes Alliance for Minority Participation (LSAMP) Conference, UTA, September 16, 2011

Led Group Student Activities for the Math and Science Retreat for Riverside Middle School, UTA Fort Worth Center, February 2010, February 2009, and February 2008

Professional Services:

Reviewed Manuscript for the Journal "The American Mathematical Monthly"

Professional Affiliations:

Women in Aviation International (WAI), Member

Association of Women in Mathematics (AWM), Member

American Mathematical Society (AMS), Member