Stephen Taiwo Salako, B. Eng, MSc., Ph.D. stsalako@ollusa.edu[work]

Summary of Qualifications

- Problem-Solver with ability to analyse, interpret and evaluate data and develop ideas.
- Highly motivated and result-oriented professional with excellent leadership and communication skills.
- Excellent analytical skills and teamwork abilities developed through research and design projects • with sound inter-personal skills developed through 14 years of lecturing experience at the University Level.

EDUCATION

Doctor of Philosophy in Mathematics University of Texas at Arlington-Arlington, TX **Graduation Date: December 2009** Thesis: Optimal control approach to image registration Master of Science in Mathematics

University of Texas at San Antonio-San Antonio, TX **Graduation Date: December 2005**

Bachelor of Engineering in Chemical Engineering with Minerals Engineering [Honors] University of Birmingham- Birmingham, U.K. **Graduation Date: July 2002**

Research Interest: Mathematics of Imaging, Optimization Problems, Partial Differential Equations, Mathematical Modeling, Math Education.

PROFESSIONAL EXPERIENCE

OUR LADY OF THE LAKE UNIVERSITY

-Chair of Math and Science -Associate Professor of Mathematics -Assistant Professor of Mathematics -Mathematics Program Head

San Antonio, TX San Antonio, TX San Antonio, TX San Antonio, TX

June 2021-Present February 2020- Present August 2012- February 2020 August 2020- Present

• College Algebra [Online/Onsite]/College Algebra for Science Majors, Elementary Algebra, Intermediate Algebra, Problem Solving, Topics in Discrete Mathematics, Calculus ii, iii, Differential Equations, Linear Algebra, Real Analysis, Numerical Analysis, Modern Algebra, Math for the liberal arts, Math for liberal arts with quantitative reasoning.

-O.E.P. Math coordinator

• Organized course content, supervised faculty teaching QUEST math classes, coordinated with the testing center to allow for math placement test, communicated with Administration/ACE Math center on student performance and intervention strategies. Spring 2016- present

-Reviewer for the Mathematics Journal (NCTM)

Reviewed several papers submitted for potential publication.

-McNairs scholars advisory board member

Fall 2019-Fall 2020

August 2016 – May 2018

 Differential Equations [onsit Mathematics 	te/independent study], Calculus III	[Onsite], Topics in Discrete
ITT TECHNICAL INSTITUTE	Arlington /San Antonio, TX	September 2009-July 2012
Full Time Instructor		
 Technical Calculus, College Ma for Problem solving. 	th 1, 2, 3, Advanced Topics in Tech	hnical Math, Statistics, Strategies
 UNIVERSITY OF TEXAS Graduate Teaching Associate 2 Taught Pre-Calculus 1, Pre-Calc Responsible for Calculus 1 and 2 Graded Abstract Algebra assign 	Arlington, TX culus 2 2 labs ments.	September 2006 – January 2010
 Upper Bound Math and Science F Trigonometry Instructor Taught Trigonometry and Pre-C 	Program [Trio] San Antonio, TX calculus topics to high school kids	Summer 2006
 UNIVERSITY OF TEXAS Tutor Real Analysis Calculus 1, 2, 3 Business Calculus Basic Statistics Chemistry 	San Antonio, TX Trigonometr Pre-Calculus College Alge TASP Physics	August 2004 – July 2006 y s ebra
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-SAPrep site director/interim Math center coordinator

June 2017 – July 2017 • Ensure implementation of pre-and-post testing and report scores to PREP office, supervised open day orientation, lunch arrangement for students, addressed any issues instructor or staff may have, visited student classrooms to monitor activities, evaluated Program Assistants and instructors. Advertised and ran the annual Math Matters program for incoming freshmen, preparing them for the College Mathematics class they would take.

TEXAS A&M UNIVERSITY San Antonio, TX

June 2011- December 2011

Adjunct Faculty

• Taught Intermediate Algebra 2, recitation labs (Calculus 1), graded and tutored in the Math lab.

UNIVERSITY OF BIRMINGHAM

Birmingham, U.K.

Summer 2001

Spring 2004, Fall 2005

Graduate Teaching Assistant 2

Internship (Solids Processing)

- Measured zeta potentials in concentrated aqueous suspensions of ceramic powders using electro acoustics.
- Performed experiments using the Acoustosizer which was only about 1 of 3 present in the U.K. at the time.
- Made solutions calibrated for tests to be run
- Represented data obtained from Experiment graphically.
- Taught Chemical Engineering doctoral students how to use the device with respect to their research.

SKILLS

Operating Systems / Mainframe

Windows 95, 98, 2000, XP, Vista

Proficient with MS Office 97, 2003, Vista Excel, Access, PowerPoint, Word, Outlook, Microsoft Visio-studios **Computer Languages/Skills**

FORTRAN, AutoCAD R14, Mathematica. Latex, MATLAB

HONORS, AWARDS AND COMMUNITY SERVICE

- Faculty Leadership Academy Fellow at Our Lady of the Lake University [2012-2013]
- National Scholars Honor Society
- Golden Key International Honour Society
- Mathematical Association of America
- Society of Industrial and Applied Mathematics
- Pi Mu Epsilon (Mathematics Honors Society)
- British Union of Chemical Engineers Society
- Who is Who at The University of Texas at San Antonio 2005-2006
- Who is Who among students in American Colleges and Universities 2005-2006
- Scholarship Recipient (2006-2009) in Science, Technology, Engineering and Mathematics provided by the NSF {National Science Foundation}
- Graduate Teaching Assistantships (2003-2009)
- 4-star [Highest grade] teaching evaluation at University of Texas at Arlington, TX (2008-2009)
- Highest student evaluation score at ITT tech Arlington out of 45 faculty members (2009)
- Head Usher at the Redeem Christian Church of God, Salvation Center, San Antonio, TX (2004-2006)
- Usher at the Redeem Christian Church of God, Household of Faith, Arlington, TX (2007-2010)
- Church Administrator, RCCG Grace Pavilion Church San Antonio, TX (2010-2018)
- Tutored privately for 3 years Trigonometry, Calculus 1 and Calculus 2.
- Guest services [Usher] at Grace Point Church San Antonio, TX (2018-present)
- Stell-Ball Award for Faculty Excellence (Spring 2018)
- Connection Team member (Usher)/ POC for 2nd service Great Oaks Church, San Antonio, TX (2022present)

GRANTS

- Flashman Endowed Fund for Special Teaching and Research Projects (Fall 2012)
 Title: Computing different powers of the arbitrary number i.
- Flashman Endowed Fund for Special Teaching and Research Projects (Fall 2014)
 Title: Modeling earthquake effects on Multi-Story Buildings
- Flashman Endowed Fund for Special Teaching and Research Projects (Fall 2016) Title: Mathematics of imaging with concentration in medical imaging [Tactile imaging]. - [Anticipated completion Date: October 2017]
- Flashman Endowed Fund for Special Teaching and Research Projects (Fall 2018) Title: Decline in Mental Math
- NSF Noyce Grant with Dr. Alyssa Maurer (Fall 2016) not funded. Co-PI
- OLLU NSF IUSE-HIS "Alas Arriba" ("Wings Up") Grant (submitted 2018)- not funded. PI
- La Cosecha Grants Initiative, funded by Higher Education for a New America (HENA) at OLLU Title: "Educating Math, Science and Kinesiology Students through STEM Colloquiums via Professionals in Industry" (Spring 2019)- awarded \$2000.
- Flashman Endowed Fund for Special Teaching and Research Projects (project to begin Fall 2021)

Title: Mathematical Modeling in Ecology

 NSF IUSE-HSI: SPIRAL [Supporting Persistence by Increasing the Relevance of Algebra to Learning] Project (July 2022)- awarded \$500,000. [co-PI]

PUBLICATIONS

- 1. Mehmet Ali Akinlar, Guojun Liao, Stephen Taiwo Salako," *A New non-rigid image registration method*" Applied Mathematics Letter. [August 2009]
- H. Chena, C. Hsieh, M. Akinlar, M. Chu, Y. Gong, H. Hsiao, T. Lin, S. Salako, G. Liao "An innovative method for nonlinear image registration" Libertas Mathematica (vol I-XXXI) [2010]
- 3. Stephen Taiwo Salako, Guojun Liao, Mehmet Akinlar, "*A method for Orthogonal Grid Generation*" General mathematics notes, volume 2, no. 1 [2011]
- 4. Stephen Taiwo Salako, "Optimal Control Approach to Image Registration." Universal Journal of Applied Mathematics, 6, 135 155. doi: 10.13189/ujam.2018.060501. [2018]

CLASSES TAUGHT

College Algebra Intermediate Algebra I Intermediate Algebra II Elementary Algebra Pre-Calculus Statistics Differential Equations Problem Solving Calculus 1 Calculus II Calculus III Technical Math Partial Differential Equations Discrete Mathematics Real Analysis Linear Algebra Numerical Analysis Math for the liberal arts Modern Algebra Topics in Discrete Mathematics Math for the liberal arts/Math for the liberal arts with Quantitative Reasoning

Presentations

- 1. "Fun with graphs", Adams Hill Elementary OLLU visit presentation, Our lady of the lake University, San Antonio, TX [Summer 2013]
- "Image Registration and Applications", Texas Undergraduate Mathematics Conference [TUMC], Nacogdoches, TX [October 18th, 2014]
- **3.** "Optimal control approach to Image registration", The 95th Texas Section Meeting of the Mathematical Association of America, The Riverwalk, San Antonio, TX [**April 9-11, 2015**]
- "How to succeed at OLLU", Math MaTTers, summer bridge program". Our Lady of the Lake University, San Antonio, TX [June 24th, 2015]
- "A method for Orthogonal grid generation", The 96th Texas Section Meeting of the Mathematical Association of America, Nacogdoches, TX [March 31st – April 2nd, 2016]
- "Experiences in London", ENGL 7339 London in Literature, Our Lady of the Lake University, San Antonio, TX [22ND of September 2016]
- 7. "Professional Burnout" at Lipscomb University in Nashville, Tennessee [June 7th-9th 2017]
- 8. "Importance of Math and Science", Vanguard Institute, Boerne, TX [June 14th 2017]
- 9. "How to succeed at OLLU", Math MaTTers, summer bridge program". Our Lady of the Lake University, San Antonio, TX [June-July 2017]
- "Optimal control approach to image registration", Texas DE Conference at University of Texas in San Antonio [March 24-25, 2018]
- **11.** "A Mathematical Modeling approach to College Algebra", The 98th Annual Meeting of the Texas Section of the Mathematical Association of America (MAA). [**April 5-7 2018**]
- 12. "How to help students be successful in job interviews", CSKLS (Christian Society of Kinesiology and Leisure studies), Elgin, Illinois [June 6th-8th 2018]

- **13.** "How to choose a career in a STEAM Field", Judge Andy Mireles Elementary School, San Antonio, Texas. [**May 22, 2019**]
- 14. "Promoting student engagement in online instruction", Our Lady of the Lake University, San Antonio, TX, Provost Professional Day, Stephen Salako, Charles Smith. [August 11-12, 2020]
- **15.** "Journey and experiences as PhDs" Our Lady of the Lake University, McNairs scholars' program, Stephen Salako, Maribel Larraga [**March 27, 2021**]
- 16. "Choosing a career in a STEM Field", Vanguard Institute [Robotics Team], Boerne, TX. [April 9th, 2021]
- **17.** "Data Analysis, Quantitative Reasoning Strategies for exceling in this area on the GRE", Presentation to the McNairs scholars' program [**June 28, 2022**]

REFERENCES

Professor Guojun Liao

The University of Texas at Arlington Department of Mathematics University of Texas at Arlington P.O. Box 19408 Arlington, TX 76019-0408 Email: liao@uta.edu Tel: (817)-272-2647

Dr. Carole King Krueger

Department of Mathematics University of Texas at Arlington P.O. Box 19408 Arlington, TX 76019-0408 Email: Krueger@uta.edu Tel: 817-272-7163

Professor Sandy Norman

Associate Professor of Mathematics & Interim Department Chair University of Texas at San Antonio Department of Mathematics One UTSA Circle San Antonio, TX 78249 Email: sandy.norman@utsa.edu Tel: (210)-458-7254

Professor Raj Wilson

University of Texas at San Antonio 6900, North Loop 1604 West San Antonio, TX 78249 Email: raj.wilson@utsa.edu Tel: (210)-458-4759