# Stephen T. Salako, B. Eng, MSc., Ph.D. stsalako@gmail.com

# **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 20 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

# **Diversity and Inclusion Certificate Program**

Cornell University- E-Cornell Completion Date: October 2022

**Coursework:** Improving Engagement, Counteracting Unconscious Bias, Diversity and Inclusion at Work, and Fostering an Inclusive Climate

**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	San Antonio, TX	July 2022- Present
- Interim Chair of Math and Science	San Antonio, TX	June 2021-July 2022
-Associate Professor of Mathematics	San Antonio, TX	February 2020- Present
-Assistant Professor of Mathematics	San Antonio, TX	August 2012- February 2020
-Mathematics Program Head	San Antonio, TX	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.

-Q.E.P. Math coordinator

August 2016 – May 2018

♦ 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.

# -Reviewer for the Mathematics Journal (NCTM)

Spring 2016- present

Reviewed several papers submitted for potential publication.

-McNairs scholars advisory board member

Fall 2019-Fall 2020

# -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**

♦ Differential Equations [onsite/independent study], Calculus III [Onsite], Topics in Discrete Mathematics

#### ITT TECHNICAL INSTITUTE

Arlington /San Antonio, TX

September 2009-July 2012

#### **Full Time Instructor**

◆ Technical Calculus, College Math 1, 2, 3, Advanced Topics in Technical Math, Statistics, Strategies for Problem solving.

#### UNIVERSITY OF TEXAS

Arlington, TX

September 2006 – January 2010

#### **Graduate Teaching Associate 2**

- ◆ Taught Pre-Calculus 1, Pre-Calculus 2
- ♦ Responsible for Calculus 1 and 2 labs
- Graded Abstract Algebra assignments.

# Upper Bound Math and Science Program [Trio] San Antonio, TX Trigonometry Instructor

Summer 2006

♦ Taught Trigonometry and Pre-Calculus topics to high school kids

## **UNIVERSITY OF TEXAS**

San Antonio, TX

August 2004 - July 2006

**Tutor** 

- ♦ Real Analysis
- ♦ Calculus 1, 2, 3
- ♦ Business Calculus

- **♦** Trigonometry
- ♦ Pre-Calculus
- ♦ College Algebra

♦ Basic Statistics

Chemistry

◆ TASP

♦ Physics

# **Graduate Teaching Assistant 2**

Spring 2004, Fall 2005

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

UNIVERSITY OF BIRMINGHAM

Birmingham, U.K.

Summer 2001

#### IRACDA/SABER MENTOR- co-mentored Dr. Ramiro Ramirez (2022- 2024)

♦ Advised Dr. Ramirez on teaching pedagogy, areas on improvement.

TITLE IX DEPUTY COORDINATOR at Our Lady of Lake University-starting Fall 2025.

#### **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 (UTSA student)- 2003-2005 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 2<sup>nd</sup> service Great Oaks Church, San Antonio, TX (2023-present)
- ♦ Elder at Great Oaks Fellowship (2022- Present)

#### **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]
- NSF Noyce Grant with Dr. Alyssa Maurer (Fall 2016) not funded. Co-PI
- Flashman Endowed Fund for Special Teaching and Research Projects (Fall 2018)
   Title: Decline in Mental Math
- 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 [Predator vs Prey relationship between Mountain Lions and deer in the Bulverde, TX area]. awarded \$600.
- NSF IUSE-HSI: SPIRAL [Supporting Persistence by Increasing the Relevance of Algebra to Learning] Project (July 2022)- awarded \$500,000. [co-PI]
- Flashman Endowed Fund for Special Teaching and Research Projects (project to begin Spring 2024)

Title: Leveraging MATLAB to address multifaceted Challenges- awarded \$600.

# SUPERVISION OF RESEARCH PROJECT/CAPSTONES/SENIOR SEMINARS IN MATHEMATICS

- Modeling earthquake effects on Multi-Story Buildings-Ramiro Ramirez
- Mathematical Modeling in Ecology [Predator vs Prey relationship between Mountain Lions and deer in the Bulverde, TX area]- Rachel Dziuba
- Mathematical Modeling of the Impact of the COVID-19 Pandemic in San Antonio, Texas-Daniel Gonzalez

### **PUBLICATIONS**

- 1. Mehmet Ali Akinlar, Guojun Liao, Stephen Taiwo Salako," *A New non-rigid image registration method*" **Applied Mathematics Letter**. [August 2009]
- 2. 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 OVERALL**

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

Senior Seminar in Mathematics

#### **CLASSES TAUGHT IN THE LAST 5 YEARS**

- College Algebra
- Quantitative Reasoning
- Calculus I
- Calculus II
- Calculus III
- Mathematics for the Liberal Arts
- Numerical Analysis
- Discrete Mathematics
- Modern Algebra

- Quantitative Reasoning
- Topics in Real Analysis
- Linear Algebra
- Pre-Calculus
- Differential Equations
- Senior Seminar in Mathematics

## **Presentations**

- 1. "Fun with graphs", Adams Hill Elementary OLLU visit presentation, Our lady of the lake University, San Antonio, TX [Summer 2013]
- 2. "Image Registration and Applications", Texas Undergraduate Mathematics Conference [TUMC], Nacogdoches, TX [October 18<sup>th</sup>, 2014]
- **3.** "Optimal control approach to Image registration", The 95<sup>th</sup> Texas Section Meeting of the Mathematical Association of America, The Riverwalk, San Antonio, TX [April 9-11, 2015]
- **4.** "How to succeed at OLLU", Math MaTTers, summer bridge program". Our Lady of the Lake University, San Antonio, TX [June 24<sup>th</sup>, 2015]
- 5. "A method for Orthogonal grid generation", The 96<sup>th</sup> Texas Section Meeting of the Mathematical Association of America, Nacogdoches, TX [March 31<sup>st</sup> –April 2nd, 2016]
- **6.** "Experiences in London", ENGL 7339 London in Literature, Our Lady of the Lake University, San Antonio, TX [22<sup>ND</sup> 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]
- 10. "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 6<sup>th</sup>-8<sup>th</sup> 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 9<sup>th</sup>, 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