

# CURRICULUM VITAE

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## TEACHING EXPERIENCE

- Northeast Lakeview College, Universal City, TX (Aug 2022 to date)
  - Taught four sections of Co-Requisite College Algebra (MATH 0214/1314)
    - 5 credit hour course of preparatory and college level content
    - Primarily offered to non-STEM students
    - Face-to-face teaching with office hours online and in person
  - Taught two sections of Pre-Calculus (MATH 2412)
  - Taught one section of Business Calculus (MATH 1325)
    - Synchronous instruction via Canvas and Zoom
  - Taught one section of College Algebra (MATH 1414)
  - Develop and deliver lectures focused on achieving course learning objectives while inserting real-world examples
  - Author appropriate methods to evaluate student learning while monitoring student progress via Canvas and MyLabMath.
  - Identify students who need extra help or motivation and set aside time to develop a learning plan to ensure successful course completion
  - Ability to motivate students, showing compassion and caring while realizing a 95% pass rate over eight completed courses
  - Supervise and instruct tutors in math laboratory covering subjects from beginning algebra and statistics to calculus
  - Active participant in faculty-mentoring program providing student guidance
- Private Tutor, Volunteer and Paid (Aug 1998 - date)
  - Provide individual and group tutoring services
  - Create individualized plans and lessons to assist students
  - Areas of specialization include pre-algebra, beginning algebra, geometry, trigonometry, elementary statistics, college algebra, linear algebra, pre-calculus, and calculus

## PROFESSIONAL EXPERIENCE

- Deputy Chief, Analysis Branch United States Air Force Personnel Center, San Antonio, TX (Oct 2020 to Aug 2024)
  - Co-led 15-member team in developing mathematical models
  - Analysis of accessions, assignments, retention, and deployment data

- Managed training, time and attendance, and award writing
- Deployed in support of Afghan refugee placement writing policy and objectives to aid in mission accomplishment
- Chief, Analysis Branch United States Air Force Recruiting Service, San Antonio, TX (Jul 2017 – Sep 2020)
  - Led 8-member team building and implementing tools to monitor and evaluate recruiting production
  - Researched trends in production and marketing to aid in recruiter placement and focus
  - Made extensive use of Microsoft Excel and Power Point to create, display and present analyses
  - Mentored young officers writing performance reports, awards and providing career guidance
- Chief, Strategic Plans Branch United States Air Force Life Cycle Management Center, Dayton, OH (Oct 2014 – Jul 2017)
  - Researched and developed Cost Capability Analysis (CCA) process
    - Rooted in decision science and analyzing customer priorities
    - Enrolled in graduate classes to earn certificate
  - Taught procedure to other analysts and organizational leaders
  - Performed on teams using CCA to select viable aircraft modifications that minimized cost and maximized capability

## EDUCATION

- Air Force Institute of Technology, Dayton, OH
  - Completed 36 credit hours toward Ph.D., (Aug 2013 - Oct 2014)
  - Focus on Statistics, Stochastic Modeling and Linear Algebra
  - Courses: Mathematical Analysis, Calculus of Variations, Linear Algebra, Theory of Probability, Mathematical Statistics, Bayesian Inference
  - Master of Science in Operations Research, March 2007, Magna Cum Laude
  - Focus on Probability, Stochastic Modeling and Queuing Theory
  - Courses: Math for Operational Sciences I&II, Math of Reliability Theory, Intro to Probability and Statistics, Linear Programming, Stochastic Modeling
  - Thesis: Approximate Analysis of an Unreliable M/M/2 Retrial Queue
    - Research considered a two-server retrial queue where both servers were susceptible to breakdowns and repairs. Arrival times, service times, repair times and retrial orbit waiting time were all assumed to be exponentially distributed.

- California State University, Sacramento
  - Bachelor's degree in mathematics, May 2002, Cum Laude
  - Focus on Mathematics Education
  - Capstone Project: Polynomials and the Rational Root Theorem
  - Teacher's assistant for Computer-aided College Algebra course
    - Oversaw lab operation providing tutorial and computer support
  - Worked in math tutorial lab assisting students in subjects ranging from beginning algebra to calculus, including statistics and probability

## PUBLICATIONS AND PROFESSIONAL CERTIFICATIONS

- Adjunct Faculty Certification – Northeast Lakeview College (2024)
- Cost Capability Analysis (CCA) Certification - Air Force Institute of Technology (2015)
- SAS Programming Language Certification (2008)
- Presented Retrial Queue thesis at Industrial Engineers Research Conference (2007)
  - Published research and results in conference journal