

Teaching Assistant, Success Academy Summer 2011
Morehead State University

- Assisted pre-calculus courses for students struggling in math. 97% of students passed each assignment

Teaching Assistant, Success Academy Summer 2009
Morehead State University

- Assisted pre-calculus courses for students struggling in math. 100% of students passed each assignment

Head Coach, MathCounts 2006-2007
Rowan County Middle School

- Re-started program by instructing bi-weekly program and guided team to win 4th place in their region

Volunteer Tutor, Mathematics 2001-2008
Morehead State University

- Tutored afternoon study labs for algebra, trigonometry, and calculus courses

RESEARCH EXPERIENCE

Logistics Analyst, Auto 2014-2015
Ryder, Inc., Lafayette, IN

- Cube utilization: Optimizing the utilization of trailer capacity as well as containers
- Dynamic combinatorial optimization: orders, drivers, tractors and trailers
- Route-based transportation network design of driver domiciles

Research Assistant 2012-2013
Purdue University, International Programs in Agriculture

- Evaluated regional economic impact of Purdue international institutional capacity building projects by developing and analyzing Input-Output models as well as Keynesian multiplier models
- Co-authored university report requested by the university president

Student Fellow, Regional Engagement 2012-2013
Morehead University, International Programs in Agriculture

- Investigated university's use of energy and emissions to promote student, faculty, and staff awareness of energy consumption and emissions

Undergraduate Research Fellow

2008-2012

Morehead State University

- Investigated the stability of numerical schemes
- Developed simulation models of bio-energy systems
- Developed Wolfram Mathematica demonstrations to assist student learning or to supplement instruction of economics and mathematics courses

REU Intern, Industrial Mathematics

Summer 2010

North Carolina State University

- Developed, programmed, and verified numerical model for for lignocellulosic biofuel production by applying finite element method, sensitivity analysis, and the method of manufactured solutions

Teaching Assistant, Success Academy

Summer 2009

Morehead State University

- Researched learning factors with the program director to develop a learning model

SCHOLARSHIPS AND AWARDS

- 2012 Outstanding service, Morehead State Math, Computer Science, & Physics Department
- 2012 March Volunteer of the Month, Kentucky PRIDE
- 2012 February Student of the Month, Student Government Association
- 2012 1st place business statistics, Kentucky Phi Beta Lambda
- 2012 1st place microeconomics, Kentucky Phi Beta Lambda
- 2012 1st place macroeconomics, Kentucky Phi Beta Lambda
- 2011 2nd place mathematics presentation, Kentucky Academy of Science
- 3023 1st runner-up speaking presentation, USA Students in Free Enterprise
- 2009 6th place US Collegiate Problem-Solving Finals, Mathematical Association of America
- 2009 Outstanding 1st year mathematics student, Morehead State University
- 2009 1st place mixed media student showcase, Morehead State College of Business
- 2008-2012 Presidential scholarship (tuition, room, and board)
- 2008-2012 Diversity scholarship

CERTIFICATION

- Wolfram Research Mathematica certification, Heartsaver® CPR AED (License 081), March 2017
- American Heart Association — American Stroke Association, Advanced Foundations Level, February 2010

PROFESSIONAL AFFILIATIONS

- National Council of Teachers of Mathematics, 2016-present
- American Educational Research Association, 2016-present
- Indiana Council of Teachers of Mathematics (ICTM), 2016-present
- American Statistical Association, 2015-present
- Society for Industrial and Applied Mathematics, 2010-present
- Society of American Foresters, 2015-present

PROFESSIONAL SERVICE

- Reviewer for journal, China Agricultural Economic Review, January 2014 - December 2014

COMMUNITY SERVICE & LEADERSHIP

- Vice-President of the Purdue University chapter of the Art of Living organization for yoga and community service, November 2012- May 2014
- President of Morehead State University Mathematics, Computer Science, and Physics Club, Aug 2008 - May 2012
- Founder and elected president of Environmental Eagles club for sustainable activities, education, and projects in eastern Kentucky, Aug 2011 - May 2012
- Vice-President of Morehead State University Students In Free Enterprise Environmental Sustainability, Aug 2008 - May 2012

HONORS

15. Outstanding service award, Morehead State Department of Mathematics, Computer Science, and Physics, May 2012
14. Awarded volunteer citizen of the month, Kentucky Pride, March 2012
13. Awarded Student of the month, Morehead State Student Government, February 2012

12. Awarded 1st place business statistics exam, Kentucky Phi Beta Lambda, May 2009, May 2011, May 2012
11. Awarded Student of the month, Morehead State Student Government, February 2012
10. Awarded 1st runner-up team presentation, USA Students in Free Enterprise, May 2008 and May 2012
9. Awarded 2nd place mathematics presentation, Kentucky Academy of Science, November 2009 and November 2011
8. Awarded 1st place business presentation, Kentucky Phi Beta Lambda, May 2011
7. Awarded Presidential Scholarship (8 semesters), Morehead State University, Fall 2008 - Spring 2012
6. Listed on the Academic Dean's List (4 semesters), Morehead State University, Fall 2008 - Spring 2010
5. Received Mathematica student certification at the Advanced Foundations Level, Wolfram Research, February 2010
4. Awarded 6th place US Collegiate Problem-Solving Finals, Mathematics Association of America, May 2009
3. Awarded Outstanding 1st year mathematics student, Morehead State Department of Mathematics, Computer Science, and Physics, May 2009
2. Awarded 1st place mixed media student showcase, Morehead State College of Business, December 2008
1. Inducted into Order of the Arrow National Honor Society of the Boy Scouts of America, Troop 58 in the Shawnee District of the Bluegrass Council, December 2004

PRESENTATIONS

12. "Academic Achievement, ELLs, Rural High Schools: Clinton Co, IN" Multicultural/Multiethnic Education: Policy and Practice for Language Learners, American Educational Research Association Annual Meeting, San Antonio, TX, April 2017
11. "Ryder Logistics Career Opportunities" Non-Academic Career Panel, Mathematics Association of America MathFest, Washington, D.C., August 2015
10. "NPV of Updated Driver Hiring" Ryder-Toyota Annual Kaizen Challenge, Georgetown, KY, July 2015
9. "The Impact of Temperature Variation on Chinese Coal Demand" Chinese Economic Society Annual Conference, West Lafayette, IN, April 2014
8. "Kentucky's Potential for Wood Biofuel Production" Southern Agricultural Economics Association Annual Conference, Birmingham, AL, November 2011

7. "Model Development for Lignocellulosic Biofuels" Joint Kentucky Academy of Science Annual Conference, Richmond, KY, March 2011
6. "Model Development for Lignocellulosic Biofuels" Mathematics Association of America Joint Mathematics Meetings, New Orleans, LA, December 2010
5. "Model Development for Lignocellulosic Biofuels" Shenandoah Undergraduate Mathematics and Statistics Conference, Harrisonburg, VA, October 2010
4. "Empirical Test of the Environmental Kuznets Curve: a Multiple Regression Approach" Morehead State Celebration of Student Scholarship, Morehead, KY, April 2010
3. "The Summer Success Academy: A Successful Learning Environment" Kentucky Association for Developmental Education Annual Conference, Richmond, KY, November 2009
2. "Demonstrating Concepts with Mathematica to Facilitate Learning" Kentucky Economic Association Annual Conference, Lexington, KY, June 2009
1. "Lagrangian Multiplier Method" Kentucky Chapter of Mathematics Association of America, Frankfort, KY, March 2009