



Amir Y. Ahmadi

Curriculum Vitæ (June 6, 2016)

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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

EDUCATION

- M.S.Ed Curriculum & Instruction, Mathematics Education** 2016-present
Purdue University
Advisor: J. Newton
- M.S. Agricultural Economics** 2012-2014
Purdue University
Academic/Research Advisors: J. Lowenberg-Deboer and R. Florax
- B.S. Mathematics** 2008-2012
Morehead State University
Cum Laude. Academic/Research Advisors: M. Dobranski and T. Mark

TEACHING EXPERIENCE

- Woodrow Wilson Teaching Fellow** 2016-present
Purdue University
- Transition to rural, secondary teaching program for mathematics education and technology education
- Tutor, Department of Mathematics** 2013-present
Purdue University
- Guide graduate and undergraduate learning of economics, mathematics, statistics, and computer science
 - Led math tutoring for Krannert College of Business summer 2014 Business Opportunity Program
- Instructor, Upward Bound** Summer 2012
Morehead State University
- Promoted high school academic performance in Health, Hiking, Outdoor Sports, and Soccer courses
- Teaching Assistant, Success Academy** Summer 2011
Morehead State University
- Assisted pre-calculus courses for students struggling in math. 62 of 65 students passed each assignment
- Teaching Assistant, Success Academy** Summer 2009
Morehead State University
- Assisted pre-calculus courses for students struggling in math. 62 of 63 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

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, Advanced Foundations Level, February 2010

PROFESSIONAL AFFILIATIONS

- National Council of Teachers of Mathematics, 2016-present
- American Statistical Association, 2015-present
- Society of American Foresters, 2015-present
- Society for Industrial and Applied Mathematics, 2010-present

PROFESSIONAL SERVICE

- Reviewer for journal, China Agricultural Economic Review, 2014

COMMUNITY SERVICE & LEADERSHIP

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

HONORS

1. Inducted into Order of the Arrow National Honor Society of the Boy Scouts of America, December 2004

PRESENTATIONS

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 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. "Model Development for Lignocellulosic Biofuels" Joint Mathematics Meetings, New Orleans, LA, December 2010
7. "Model Development for Lignocellulosic Biofuels" Joint Mathematics Meetings, New Orleans, LA, December 2010
6. "Model Development for Lignocellulosic Biofuels" 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