Jordan Barry

Adjunct Assistant Professor, Mathematics TAMUCT
Email: jbarry@tamuct.edu

Employment History

Assistant Professor, Mathematics: 08/17-Present
Employer: Austin Community College District
Job Duties:
- Teach Mathematics and Statistics courses: College Algebra, Contemporary Mathematics, Elementary Statistics, Business Calculus, Calculus I, Linear Algebra, Differential Equations.
- Assess student progress, grade work
- Write and administer tests
- Co-chair, Statistics Corequisite Committee

Adjunct Professor, Mathematics: 01/17-Present
Employer: Texas A&M University-Central Texas
Job Duties:
- Teach Discrete Mathematics, Numerical Analysis, and Linear Programming courses
- Assess student progress, grade work
- Write and administer tests
- Research/office work

Graduate Assistant, Mathematics: 08/15-05/16
Employer: Texas A&M University-Central Texas
Job Duties:
- Proofreading
- Book editing
- Research
- Web design/development

Math-Lab Tutor: 08/13-05/14
McLennan Community College
Job Duties:
- Help Students with math course work
- Developmental Math, College Algebra, Business Math, Calculus I-III, etc.
- Lab maintenance and cleaning

Graduate Assistant: 08/09-08/11
Employer: University of Oklahoma 660 Parrington Oval, Norman, OK
Job Duties:

- Teaching Aural Skills
- Grading Written Music Theory
- Student Tutoring

Education

Texas A&M University-Central Texas: 08/14-12/16 M.S., Mathematics

University of Oklahoma: 08/09-05/11 M.M., Music Theory

University of Texas at Arlington: 08/05-05/09 B.M., Music Theory

Computer Skills

Proficiency with C++; MATLAB coding and scripting; building mathematical models with Excel; experience computing statistical data with R; non-academic work with Python for predictive modeling and machine learning. I have some Java and HTML experience. In addition, I have limited experience with JavaScript, Haskell, and Visual Basic. Basic computer/Internet skills and proficiency with Microsoft Office Suite/LibreOffice. I have used PC, Mac, and Linux (Ubuntu, OpenSUSE, Raspbian) operating systems. I have some knowledge of shell scripting and use of ownCloud and other open-source database software.

Scholarly Work and Research

Published Work:
A Physics-based model for target coverage. Conference presentation. IBII International Conference on Mathematics and Applications. Houston, TX April 2016.

A Physics-based model for target coverage. Master's Thesis.

An efficient scalable sensor node placement algorithm for fixed target coverage applications of wireless sensor networks. With A. Njoya, C. Thron, W. Abdou, T. Emmanuel, et al. in IET Wireless Sensor Systems, 04/2017.

A Computational Physics-based Algorithm for Target Coverage Problems. With C. Thron. Book chapter in Advances in Nature-inspired Computing and Applications

A Visualizable, Constructive Proof of the Fundamental Theorem of Algebra, and a Parallel Polynomial Root Estimation Algorithm. With C. Thron, forthcoming.

Research Interests:

Applied dynamical systems, non-convex optimization, heuristic methods for optimization, neural networks, bootstrapping statistics and estimator variance, Bayesian inference, and machine learning.