CURRICULUM VITAE

CONTACT

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:: Kaggle - ThankyouBayesGod

RESEARCH AND TEACHING INTERESTS

Instructional technology (K-16 STEM), Math intervention programs, Inquiry/discovery-based STEM curriculum, Teacher Education, Machine Learning/Data Mining, Statistics education.

RELEVANT COURSEWORK

Statistical Methods, Machine Learning, Probability, Mathematical Statistics, Regression Analysis, Social Network Analysis, Bayesian Statistical Methods, Scientific Computing.
Languages in order of proficiency: Python, C++, R , Fortran, Javascript

EDUCATION

University of Texas-Austin (2016- present) Phd, Education:Curriculum and Instruction-STEM Education
Portfolios: Applied Statistical Modeling (Department of Statistics and Data Science) and Scientific Computation (Department of Statistics and Data Science and Texas Advanced Computing Center)

University of California-Los Angeles (2012)Masters of Education/ Preliminary Credential-Secondary Mathematics
Thesis: The Concept Quiz: Effects on Student Motivation, Anxiety, and Performance.

University of California-Davis (2008) BA, Political Science, (2008)

HONORS AND AWARDS

Semi Finalist- Algorithm For Change AI/ Machine Learning Competition (NYU) (2018) Matrix Factorization and Variable Selection-based Recommendation System for College Calculus I Classrooms.

Recipient- Graduate Student Recruitment Fellowship, (2016-2018)

WORK EXPERIENCE

University of Texas at Austin:
Instructor - Mathematics 175T Computer Science Pathways Part of a Computer Science micro- credential for undergraduate math and science majors. Focused on pedagogical content knowledge, multiple representations, computational thinking, and project based-learning.

Teaching Assistant- UTeach program(Austin, TX) (Spring 2017-present) Duties: Assisting student service teachers with lesson planning, data management, and classroom teaching

Graduate Research Assistant: Texas Advanced Computing Center - Applied Research Laboratories (Austin, TX) Spring 2019- present
Duties: Creating Quantum Computing curriculum for high schools students in the Canvas Learning management system. To include: Python and mathematics tutorials via Jupyter notebooks

Graduate Research Assistant: Inquiry Based Learning- Department of Mathematics (Austin, TX) Spring 2017
Duties: Provide support in Integral Calculus for a student intervention population while also conducting quantitative and qualitative research. Part of an initiative to serve the Discovery Scholars, a group of students in the school of undergraduate studies who have been identified as at-risk academically.

Teaching Assistant- Differential Calculus w/ Effective Thinking, Integral Calculus, Differential Calculus for Science (Austin, TX) (Spring 2017-Fall 2018)
Duties: Course planning and design, collaboration with mathematics professors, TAs,and learning center support staff.

USC Hybrid High School-Blended Learning Mathematics instructor (Los Angeles, CA) (2014-2016)
Duties: Digital curriculum creation and implementation. Courses taught: Algebra 2,Precalculus, Geometry, and AP Computer Science. Creation of digital curriculum using: Canvas Learning management system, exittix.com, Desmos, Khan Academy, Classcraft, Doceri, and Google Docs.

Staff adviser STEAM club: Supervised projects involving engineering, computer science/coding, electronics, and digital media creation.

Locke High School-Mathematics instructor (Los Angeles, CA) (2011-2014)
Duties: Mathematics instruction. Courses taught: Algebra 2, Precalculus, Trigonometry, and Integrated Mathematics

PRESENTATIONS/ CONFERENCES

"Math and Science as a Critical Lens" presented at the Free Minds, Free People conference, Chicago, IL (July 2014)

"Payday Loans and Predatory Lending: Investigating Using Technology in an Algebra 2 Classroom" presented at the Creating Balance in an Unjust World Conference on Math Education and Social Justice, San Francisco, CA. (January 2016)

"Lets Grow a Generation of Data Natives" UT Austin Tedx conference, (April 2019)

"Machine Learning Bias: Examining Pretrial Risk Assessment Algorithms" presented at the Creating Balance in an Unjust World Conference on Math Education and Social Justice, Honolulu, HI. (January 2019)

National Council of Teachers of Mathematics - 2021 Dallas Regional Planning Committee. Duties: Planning and review of submitted proposals.

SERVICE/CAMPUS ORGANIZATIONS

Founder (Fall 2017-present)
Dinner with Sixteen Longhorns- Biannual event bringing together representatives of 16 student organizations.

Founder/President (Spring 2018-present)
LAMDA@edu: Student (Department of Statistics and Data Science) group (School of Education) focused on Learning Analytics, Machine learning/Data Mining, and Artificial Intelligence.