

YUANYUAN SONG

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Department of Mathematics, Gordon Palmer Hall
The University of Alabama, Tuscaloosa, AL 35487

EDUCATION

Ph.D. Applied Mathematics, The University of Alabama, Tuscaloosa, AL *May 2015*

Dissertation: Stability Analysis of a Bilayer Contained within a Cylindrical Tube

M.A. Mathematics, The University of Alabama, Tuscaloosa, AL *May 2011*

B.S. Statistics, Nankai University, Tianjin, China *June 2009*

TEACHING EXPERIENCE

Assistant Professor/Director of Lower Division Curriculum Fall 2023 - Present
The University of Alabama *Tuscaloosa, AL*

- Classes taught:
 - Introduction to Linear Algebra
 - Online Applied Differential Equations I
- Duties involved:
 - Work with course coordinators to review and update syllabi.
 - Develop new course outcomes and learning goals for each course.
 - Develop new test questions.
 - Review and implement new software.
 - Chair textbook selection committees.
 - Write content for math placement test.
 - Record curriculum changes each semester.
 - Coordinate with MTLC Committee.
 - Submit Office of Institutional Research & Assessment data requests for MTLC and relay data
 - Conduct surveys and collect/analyze data from courses on content/logistics/test questions/ etc

Instructor/Course Coordinator
The University of Alabama

Spring 2015 - Spring 2023
Tuscaloosa, AL

- Course Coordinator of
 - Calculus & Applications
 - Calculus II, and Calculus III
 - Introduction to Linear Algebra
- Classes taught:
 - Introductory Algebra (both in-person and online)
 - Intermediate Algebra (both in-person and online)
 - Finite Mathematics (both in-person and online)
 - Precalculus Algebra (both in-person and online)
 - Precalculus Trigonometry (both in-person and online)
 - Precalc Algebra & Trig (Online)
 - Calculus & Applications
 - Calculus I, Calculus II, and Calculus III (both in-person and online)
 - Honors Calculus I, Honors Calculus II, and Honors Calculus III
 - Introduction to Linear Algebra
 - Applied Differential Equations I
 - Theory of Probability

Graduate Teaching Assistant/Tutor

Fall 2009 - Fall 2014

- Class taught:
 - Recitation classes: Calculus I and Calculus II
 - Applied Differential Equations I
 - Business Calculus & Applications
 - Intermediate Algebra
 - Precalculus Algebra
 - Precalculus Trigonometry

Training

- Innovation Scholar in Online Teaching, Spring 2018.
- College of Continuing Studies Online Educator Professional Development Program, Fall 2016.

AWARDS

The University of Alabama Graduate Student Outstanding Teaching Award, (2013-2014)

Graduate Student Travel Grant, (2014, 2013)

Graduate Teaching Assistantship, (Fall 2009 – Fall 2014)

Henry Miller Fellowship, (2013, 2012, 2011)

COMPUTER COMPETENCIES

Maple, Matlab, SAS, L^AT_EX, C++, MS Office.

ACADEMIC ACTIVITIES

November 22-25, 2014 – Presentation: *Nonlinear analysis of the influence of surfactant on the stability of a liquid bilayer inside a compliant tube*. The 67th Annual Meeting of the APS Division of Fluid Dynamics – Respiratory Bio-Fluid Dynamics II session (E15), San Francisco, CA.

January 15-18, 2014 – Participant: 2014 Joint Mathematics Meetings, Baltimore, MD.

November 24-26, 2013 – Presentation: *The influence of surfactant on the stability of a liquid bilayer inside a rigid tube*. The 66th Annual Meeting of the APS Division of Fluid Dynamics – Fluid Film Flows session(L28), Pittsburgh, PA.

November 16, 2013 – Poster: *The influence of surfactant on the stability of a liquid bilayer inside a rigid tube*. The 2nd annual WISE event at The University of Alabama, Tuscaloosa, AL.

2012, 2011, 2010, 2009 – Participant: The Annual University of Alabama System Applied Mathematics Meeting.

Summer 2010 – Participant: Penn State–Göttingen International Summer School in Mathematics.

VOLUNTEER EXPERIENCES

Led and coordinated the grading team for **MATHCOUNTS** competition Tuscaloosa chapter – 2024, 2023, 2022, 2020, 2019

Taught cultural enhanced classes for **Heart Touch Program** in Tuscaloosa – 2014-2015