

# ANNA WAN, PH.D.

Southern Hall 201A, 118 College Drive, Box 5043 Hattiesburg, MS 39406

Office: (601)266 4303 ◊ E-mail: anna.wan@usm.edu

## EDUCATION

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### **Auburn University**

January 2009–December 2013

*Ph.D. Curriculum and Teaching: Secondary Mathematics Education*

*Auburn, Alabama*

- Advisor: Dr. Marilyn E. Strutchens
- Dissertation: An Exploratory Study of High School Geometry Teachers Applied Content Knowledge

### **California State University Channel Islands**

August 2004–May 2005

*Single Subject Teaching Credential - Secondary Mathematics*

*Camarillo, California*

- Hired as full time teacher at Pacifica High School during year-long internship

### **California State University Channel Islands**

January 2003–May 2004

*Bachelor of Arts: Liberal Studies-Teaching and Learning Option*

*Camarillo, California*

- Course work in elementary education, general education, and advanced mathematics
- Magna cum laude

## TEACHING EXPERIENCE

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### **The University of Southern Mississippi**

Fall 2016–Current

*Assistant Professor - Mathematics Licensure*

*Hattiesburg, Mississippi*

- Director: Eagle Maker Hub
- Research Area: Maker technology incorporation in STEM core courses for K-12
- Teach mathematics and mathematics education courses

### **Columbus State University**

Fall 2013–Summer 2016

*Assistant Professor - Secondary Mathematics Education*

*Columbus, Georgia*

- Program Coordinator - Secondary Mathematics Education
- Research areas: Teacher knowledge, 3D printing, and constructivism in remedial math courses
- Taught education, mathematics education, and mathematics courses

### **Auburn University**

August 2009–July 2013

*Graduate Teaching Assistant - Secondary Mathematics Education*

*Auburn, Alabama*

- Taught secondary mathematics education courses (undergraduate)
- Assisted with NSF grant initiation, implementation, data collection, and completion
- Research: Teacher Applied Pedagogical Content Knowledge

### **California State University Channel Islands**

Fall 2005–Spring 2008

*Teaching Associate - Mathematics*

*Camarillo, California*

- Taught mathematics and mathematics education courses (undergraduate)

### **Pacifica High School**

Fall 2004–Fall 2008

*Teacher - Mathematics*

*Oxnard, California*

- Sponsored clubs for at-risk youth
- Used graphing calculators, Promethean Board (and accessories), and Web applets
- Hosted undergraduate mathematics students in my classroom for laboratory experience (2 semesters)

## TEACHING EXPERIENCE (CONTINUED)

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### **Los Primeros Middle School**

*Middle School Laboratory Placement: 8<sup>th</sup> grade*

Spring 2004

*Camarillo, California*

- Co-teaching model, semester-long 60 hour placement
- STEM Integrated lessons, art and mathematics integrated lessons, student remediation techniques

### **Art Haycox Elementary School (Formerly Hadock Elementary)**

*Elementary Laboratory Placement: 1<sup>st</sup> grade*

Fall 2003

*Oxnard, California*

- Co-teaching model, semester-long 60 hour placement
- STEM Integrated lessons, project based and problem based instruction, center based activities

## COURSES TAUGHT

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### **The University of Southern Mississippi**

*Assistant Professor - Mathematics Licensure*

Fall 2016–Current

*Hattiesburg, Mississippi*

- Undergraduate - Mathematics for Elementary Teachers 1 & 2 (MAT 210, MAT 310)
- Undergraduate - Mathematics for Elementary Teachers 1 (MAT 310) Online
- Undergraduate - Introduction to Mathematics Education (MAT 220)
- Undergraduate - Real Numbers for Secondary Mathematics Teachers (MAT 301)
- Undergraduate - Geometry 1 (MAT 370)
- Undergraduate - Mathematics for Middle School Teachers (MAT 410)
- Undergraduate - Secondary Mathematics Methods (MAT 457/L)
- Graduate - Topics in Topology and Geometry I, II, III (MAT 683)
- Graduate - Special Topics: Advanced Mathematics Education Research (SME 720)
- Graduate - Research in Mathematics Education (SME 792)

### **Columbus State University**

*Assistant Professor - Secondary Mathematics Education*

Fall 2013–Summer 2016

*Columbus, Georgia*

- Technology in teaching middle/secondary mathematics classroom (undergraduate/graduate)
- Exploring Socio-Cultural Contexts on Diversity in Educational Settings - Study abroad Ecuador
- Project Based Instruction - Secondary mathematics and science (undergraduate)
- Curriculum and Methods in Secondary Mathematics (undergraduate/graduate)
- Curriculum and Methods in Middle Grades Mathematics (undergraduate/graduate)
- Student Teaching - Middle and secondary mathematics (undergraduate/graduate)
- Precalculus (undergraduate)
- Mathematical Modeling (undergraduate)
- 3D Printing in the Content Areas (undergraduate/honors)

### **Auburn University**

*Graduate Teaching Assistant - Secondary Mathematics Education*

August 2009–July 2013

*Auburn, Alabama*

- High School Mathematics Methods (undergraduate)
- Middle School Mathematics Methods (undergraduate)
- Secondary Mathematics Internship (student teaching): Supervised student teachers

### **California State University Channel Islands**

*Teaching Associate - Mathematics*

Fall 2005–Spring 2008

*Camarillo, California*

- College Algebra (undergraduate)
- Mathematics for Elementary Teachers (undergraduate)

## COURSES TAUGHT (CONTINUED)

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**Pacifica High School**

*Teacher - Mathematics*

Fall 2004–Fall 2008

*Oxnard, California*

- Pre-algebra, Algebra ABC series, Algebra 1, geometry

## CERTIFICATIONS

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**Picademy Educator - Atlanta, Georgia Cohort** (July, 2018)

**Quality Matters - Higher Education** (January 2015)

**Zumba Fitness Instructor International Certificate** (April 2012)

**Texas Instruments Technology Teacher Trainer Certificate** (June 2010)

**Promethean Teacher Trainer** (July 2008)

**California Secondary Mathematics (Full) Clear Credential** (June 2006)

**California Florist License** (February 2003)

## PUBLICATIONS

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### Peer Reviewed Journal Articles:

Smith, L., Martin, W. G., Wan, A., & Duenas, G. (2017). Students Reactions to Reform Mathematics Pedagogy in a Postsecondary Remedial Mathematics Course. *The Mathematics Enthusiast*, 14(1), 289-308. (Contribution 30%, Acceptance 18%)

Smith, L., Martin, W. G., Wan, A., Duenas, G. Shumack, K., & Beziat, T. (2015). Using reform pedagogy to improve students application skills in college remedial mathematics courses. *Mathematics and Computer Education*, 49(2), 124-138. (Contribution 30%, Acceptance 33%)

Peppers, D., Wan, A., & Phillips, H. (2014). A Closer Look at Manipulatives in Remediation. *Mathematics Teaching in the Middle School*, 20(3). (Contribution 40%, Acceptance 11%)

### Book Chapter:

Wan, A., & Ivy, J. (2019). Adding a New Dimension to Teaching Mathematics Educators. In M. Niess, H. Gillow-Wiles, & C. Angeli (Eds.), *Handbook of Research on TPACK in the Digital Age* (pp. 390-412). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-7001-1.ch018 (Contribution 60%, peer reviewed chapter proposal and chapter manuscript)

### Instructables: Informational User-Created and Uploaded Website

Teacher sections are curated by teachers and featured content were peer reviewed by Maker Educators

Wan, A. (2018, September 27). 3D Printing Superhero Badges with Elementary Students. Retrieved from <https://www.instructables.com/id/3D-Printing-Superhero-Badges-With-Elementary-Stude/> (Retrieved 12/21/18: 23 views)

Wan, A. (2018, September 27). Setting Up Tinkercad for Classes of Students. Retrieved from <https://www.instructables.com/id/Setting-Up-Tinkercad-for-Classes-of-Students/> (Retrieved 12/21/18: 288 views, 1 like)

Wan, A. (2017, November 14). Truncated Cylinder Connections to Graphing Sine/Cosine Functions. Retrieved from <https://www.instructables.com/id/Truncated-Cylinder-Connections-to-Graphing-SineCos/> (Retrieved 12/21/18: Featured project, 762 views, 5 likes, Teacher Contest Winner)

Wan, A. (2017, October 27). 2D to 3D Tealight Holder. Retrieved from <https://www.instructables.com/id/2D-to-3D-Tealight-Holder/> (Retrieved 12/21/18: Featured project, 593 views, 14 likes, 2 comments)

## GRANTS

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**DOD** (University of Southern Mississippi, Hattiesburg, MS, Fall 2019)

Principal Investigator (\$249,734): Maker Facility Enhancement

**Mississippi Department of Education** (Lamar County, MS, Fall 2017–Current)

Teacher Integration of Digital Fabrication from Mobile Makerspace (\$30,000)

Co-Pi with Teresa Sappington and Bruce Lampe at Lamar County CTE

**Jackson County Schools** (University of Southern Mississippi, Hattiesburg, MS, Spring 2018)

Mathematics Teacher Integration of Digital Fabrication from FabLab (\$15,441)

**CMI2 funding through Department of Defense** (University of Southern Mississippi, Hattiesburg, MS, 4/1/18-12/31/18) Educational Outreach - Hackathons, professional development, summer camps

Pi: Gordon Cannon, Project Lead: Julie Cwikla, Project Co Lead: Anna Wan (\$300,000)

**Maker Ed** (Maker Educator Meetups, Southern Mississippi, Fall 2017)

K-12 Teacher Professional Development (\$600)

**Knight Foundation Grant** (ColumbusMakesIT, Columbus, GA, Spring 2015–Fall 2016)

Education Project Lead and 3D Printing Project Lead (\$55,060)

**Graduate Student Recruitment Grant** (Columbus State University, Columbus, GA, Fall 2015)

Maker Faire Atlanta (\$385)

**Improving Teacher Quality** (Columbus State University, Columbus, GA, Spring 2015–Spring 2016)

Principal Investigator (\$49,359): Developing Mathematical Literacy

**Improving Teacher Quality** (Columbus State University, Columbus, GA, Spring 2014–Spring 2015)

Principal Investigator (\$51,510): Developing Number Sense and Conceptual Understanding

## SPEAKING ENGAGEMENTS: CONFERENCES

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### International

**10/28–30/2019** (ISC)2 International Security Congress (Orlando, FL)

(Panel) STEAM Why Not? One Year Later

**10/19–20/2018** Maker Ed Convening (San Francisco, CA)

(Ignite Talk) Making Accessible For All Students in K-12

**6/24–27/2018** International Society for Technology in Education (Chicago, IL)

(Poster) 3D Printing for Middle Grades Mathematics Education Classroom

Coauthor: Luke Smith - Auburn University Montgomery

**6/9–10/2018** Nation of Makers (Santa Fe, NM)

(Ignite Talk) Making for All K-12 Students

**5/16–17/2017** Maker Ed Convening (San Francisco, CA)

(Interactive Display) Eagle Maker Hub and Content Based Lessons

**2/20–21/2017** The Future of Making (Auburn, AL)

(Oral Presentation) Wearable Technology: Perspectives from  
DOD Research, Computer Science, Education, and Mathematics

**6/30/2015** International Society for Technology in Education (Philadelphia, PA)

(Interactive Display) 3D Printing ecosystems

## SPEAKING ENGAGEMENTS: CONFERENCES (CONTINUED)

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### National

- 2/7–9/2019** Association of Mathematics Teacher Educators (Orlando, FL)  
(Workshop) Integrating Digital Fabrication for Mathematics Teachers Educators
- 5/20–22/2014** UTeach Annual Conference (Austin, TX)
- 9/8–9/2014** Instructional Technology Conference (Pine Mountain, GA)  
(Interactive Display) Integrated Technology in Teaching Mathematics
- 5/20–22/2014** UTeach Annual Conference (Austin, TX)  
(Oral Presentation) Preparing UTeach Columbus Students for Success on EdTPA
- 3/19–20/2010** Infinite Possibilities Conference (Los Angeles, CA)  
(Oral Presentation) Geometry Teacher Knowledge

### State/Regional

- 11/8–9/2019** Mississippi Council of Teachers of Mathematics Annual Conference (Hattiesburg, MS)  
(Workshop) University Makerspace for Your Mathematics Classroom  
(Workshop) Reimagining Elementary Math Teaching in a Maker Space with 2nd Graders
- 8/1–3/2018** 2018 Southeast: Science Bootcamp for Librarians (Ocean Springs, MS)  
(Interactive Display) Eagle Maker Hub - Making for University Students
- 7/26–28/2017** MS ACTE (Jackson, MS)  
(Oral Presentation) CTE&Content Area Collaborations in K-12 Maker Education  
Coauthor: Teresa Sappington - Lamar County CTE Center
- 10/15/2015** Georgia Association of Mathematics Teacher Educators (Rock Eagle, GA)  
(Oral Presentation) Implementation of a UTeach Replication Program and EdTPA
- 9/18–19/2015** Instructional Technology Conference (Columbus, GA)  
(Oral Presentation) Effectively Using 3D Printers for Your Math Classroom
- 4/14/2014** East Alabama Council of Teachers of Mathematics (Opelika, AL)  
(Interactive Presentation) Development of Circles From Elementary to Secondary  
Coauthors: Nancy Harris & Katelyn McConnell - Undergraduate Students
- 12/3/2011** California Mathematics Council-North (Asilomar, CA)  
Session 1: Using NOAA Website for Data  
Session 2: Survey of Technology for Use in Mathematics Classroom
- 10/1/2010** Alabama Council of Teachers of Mathematics (Montgomery, AL)  
(Interactive Presentation) Origami in Math Class Emphasizing the Math

## SPEAKING ENGAGEMENTS: GENERAL AUDIENCE

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- 9/25/2019** True South Economic Course (Hattiesburg, MS) (Interactive Presentation)  
Digital Fabrication at the University of Southern Mississippi and Tour of EMH
- 11/19/2018** Petal Rotary: 3D Printing and More (Petal, MS) (Interactive Presentation)
- 9/19/2018** True South Economic Course (Hattiesburg, MS) (Interactive Presentation)  
Digital Fabrication at the University of Southern Mississippi and Tour of EMH
- 8/31/2018** Congressional Staffer Visit (Hattiesburg, MS) (Interactive Workshop)  
Eagle Maker Hub tour and Simple Circuits
- 5/22/2018** Hattiesburg Rotary: 3D Printing and More (Hattiesburg, MS)  
(Interactive Presentation)
- 5/15/2018** Mississippi Makers: Eagle Maker Hub (Hattiesburg, MS)  
(Interactive Workshop)  
Digital Fabrication at the University of Southern Mississippi
- 9/19/2017** Milsaps Arts and Lecture Series (Jackson, MS)  
Shining a Light on Mississippi through S.T.E.A.M.: Panel Discussion
- 8/21/2017** Solar Eclipse Extravaganza (Jackson, MS) (Interactive Display)  
Make Your Own Pinhole Viewers
- 6/23/2017** Mississippi Museum of Natural Science: Dino Fun Friday (Jackson, MS)  
(Interactive Display)  
3D Printed Fossils and Symmetry of Dino Fidget Spinners
- 6/20–21/2017** Eagle Maker Hub Public Course (Hattiesburg, MS) (Interactive Workshop)  
Design Your Own Fidget Spinner
- 4/28–30/2017** Meridian Maker Faire (Meridian, MS) (Interactive Display)  
Eagle Maker Hub – Digital Fabrication for K-12
- 4/26/2017** Eagle Maker Hub Public Course (Hattiesburg, MS): Introduction to 3D Printing  
(Interactive Workshop)
- 2/24/2017** Mississippi Museum of Natural Science: Science Makers (Jackson, MS)  
Eagle Maker Hub and 3D Printed Science (Interactive Display)
- 10/8/2016** Baton Rouge Maker Faire (Baton Rouge, LA) (Interactive Display)  
3D Printing at The University of Southern Mississippi
- 5/27/2016** Mad Genius (Jackson, Mississippi): 3D Printing: History, Present, and Future  
(Interactive Presentation)
- 4/13/2016** Columbus State University Library (Columbus, GA) (Interactive Workshop)  
Open Dialogue About 3D Printing in Various Settings
- 10/15/2015** Lunch and Learn (Columbus, Georgia) (Interactive Workshop)  
3D Printing: Overview of research and use
- 10/ 3–4/2015** CSU Bot C.A.V.E. (Atlanta, Georgia) (Interactive Display)  
TPACK – Knowledge for 3D Printing in the Content Classrooms
- 7/3/2015** Columbus Uptown Artwalk (Columbus, Georgia) (Interactive Display)  
3D Printing at CSU and ColumbusMakesIT
- 9/12/2012** California State University Channel Islands (Camarillo, California)  
Mathematics Seminar: Geometry Teacher Knowledge (Oral Presentation)

## SPEAKING ENGAGEMENTS: PROFESSIONAL DEVELOPMENT FOR TEACHERS

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- 9/6/2018** Polymer Science High School Teacher Retreat (Hattiesburg, MS)  
(Oral Presentation) Eagle Maker Hub: Resources and Activities
- 10/16/2018** Fostering Collaborative Learning (Hattiesburg, MS)  
Panel Discussion for University Faculty
- Summer 2018** Lamar County Mobile Makerspace Training (Lamar County, MS)  
(Interactive Presentation) Integrating digital fabrication into classroom teaching
- 6/4-8/2018** 3D Printing, Arduino, and Raspberry Pi (Ocean Springs, MS)  
(Interactive Presentation) Interactive PD with camp for 3rd-8th grade students
- Spring 2018** Incorporating Making into the Classroom (Hattiesburg, MS)  
(Interactive Presentation) Interactive series of Meet-ups for Maker Educators
- Spring 2018** Incorporating FabLab into the Classroom (Vanceleave, MS)  
(Interactive Workshops)  
Semester-Long professional development for K-12 teachers in Jackson County
- 6/18-30/2017** Incorporating FabLab into the Classroom (Vanceleave, MS)  
(Interactive Presentation) Digital Fabrication for Your Content Classroom
- 6/2-8/2017** Summer Mathematics Institute (Hattiesburg, MS)  
(Interactive Presentation) 3D Modeling and Printing for Your Mathematics Classroom
- 7/23/2016** Bridging Divides (Hattiesburg, MS)  
(Interactive Presentation) 3D Printing and Its impact on Human Geography
- 3/23/2016** Auburn University STEM Seminar (Auburn, AL)  
(Interactive Presentation)  
3D Printing in the STEM Teacher Preparation Classes
- 3/2/2016** Spencer High School (Columbus, GA)  
(Interactive Presentation)  
3D Printing for High School Mathematics and Science Teachers
- 6/15-17/2015** Developing Mathematical Literacy (Chattahoochee County, GA)  
(Interactive Presentation) Professional development for Middle School Teachers
- 6/16-18/2014** Conceptual Understanding for Elementary Teachers (Thomaston County, GA)  
(Interactive Presentation) Developing Number Sense and Conceptual Understanding through Number Talks and Manipulatives
- 4/11/2014** EdTPA Training Workshop (Columbus, GA)  
(Interactive Presentation) Middle Grades/Secondary Mathematics
- 11/14/2013** Fall Mathfest (Columbus, GA)  
(Keynote speaker) Celebrating you, the professional
- 10/28-29/2013** DoDEA Workshop for Elementary Teachers (Columbus, GA)  
(Interactive Presentation) Fundamentals for Base 10: K-2 and 3-4 grade bands
- 4/27/2013** Math Masters (Columbus, GA)  
(Interactive Presentation)  
Connecting Standards for Mathematical Practice to Content Standards

## PROFESSIONAL DEVELOPMENT FOR TEACHERS (CONTINUED)

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- 3/22/2013** March Mathness (Columbus, GA)  
(Oral Presentation) Standards for Mathematical Practice and Content Standards
- 2/18/2013** Auburn Mathematics Education Society Meeting (Auburn, AL)  
(Oral Presentation) For the Love of Math
- 6/23/2011** Mathematics Learning Communities - Summer Institute (Tallahassee, AL)  
Vertical Alignment for mathematics teachers, grades 5–12
- Spring 09–11** TEAM-Math Presenter for 6<sup>th</sup>–8<sup>th</sup> grade teachers (Auburn, AL)  
Transforming East Alabama Mathematics  
Collaborated with mathematicians, mathematics education professors, and mathematics teachers to provide professional development for in-service teachers
- 5/25/2010** Reading Strategies for All Classrooms (Chambers County, AL)  
(Oral Presentation) Reading Strategies in Secondary Mathematics

## SPEAKING ENGAGEMENTS: UNIVERSITY STUDENTS

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- 9/16/2019** Design Thinking for Entrepreneurship (Hattiesburg, MS)  
(Interactive Workshop) Makerspace for Entrepreneurs
- 11/7/2018** Senior Entrepreneurship Course: New Venture Creation (Hattiesburg, MS)  
(Interactive Presentation) 3D Modeling and Printing for Entrepreneurs
- 10/9/2018** Mathematics Education Research Panel (Hattiesburg, MS)  
(Oral Presentation) Connecting Teacher Knowledge to Digital Fabrication
- 9/11/2018** Senior Marketing Course: Senior Marketing (Hattiesburg, MS)  
(Interactive Presentation) 3D Modeling, Printing, and Capabilities of EMH
- 3/2/2018** Southern Miss Student Leadership Summit (Hattiesburg, MS)  
Women in Leadership Panel
- 10/20/2017** 3D Modeling and Printing for Secondary Mathematics (Starkville, MS)  
(Interactive Presentation) Digital Fabrication for Secondary Mathematics Pre-service Teachers
- 9/13/2017** Southern Mississippi Maker Educator Meetup (Hattiesburg, MS)  
(Interactive Presentation) Maker Education for Pre-service Teachers
- 1/14/2016** 3D Modeling and Printing for Project Based Instruction (Columbus, GA)  
(Interactive Presentation) Secondary Mathematics and Science Preservice Teachers
- 9/23/2015** UTeach Lunch and Learn (Columbus, GA)  
(Interactive Presentation) 3D Printing for Your Future Classroom



## SPEAKING ENGAGEMENTS: EVENTS FOR K-12 STUDENTS

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- 11/18/2019** EMH Hosts 25 REACH from TIMSS Elementary (Hattiesburg, MS)  
(Interactive Workshop) Measurement for Elementary Students
- 11/8/2019** Eagle Maker Hub Hosts JROTC STEM Invitational (Hattiesburg, MS)  
(Interactive Workshop) Hacking Myths and Facts & How secure is your computer?
- 12/5–6/2018** EMH Hosts 80 Petal Primary 2nd Grade (Hattiesburg, MS)  
(Interactive Workshop) Lasercut ornaments, Emojis, and Tower Engineering
- 11/30/2018** Eagle Maker Hub Hosts Girl Scouts (Hattiesburg, MS)  
(Interactive Workshop) 3D Printed Christmas Ornaments
- 11/2/2018** Eagle Maker Hub Hosts JROTC STEM Invitational (Hattiesburg, MS)  
(Interactive Workshop) Hacking Myths and Facts & How secure is your computer?
- 6/13/2018** EMH Hosts 100 Cub and Boy Scouts (Hattiesburg, MS)  
(Interactive Workshop) 3D Modeling, 3D Printing, Coding, Robotics
- 6/4–8/2018** EMH Hosts 120 Students from Ocean Springs (Hattiesburg, MS)  
(Interactive Workshop) Camp CyberTEAM 3rd–6th graders
- 5/14/2018** 3D Printing Awesomeness! (Pelahatchie, MS)  
(Interactive Presentation) 3D Printing for First Graders
- Spring 2018** EMH Hosts Aquabots (Hattiesburg, MS)  
(Interactive Workshop) 3D Modeling and Printing SAFFIR Robot for 3rd grade girls
- 12/1–4/2017** EMH Hosts 60 Thames Elementary 3rd and 4th Grade (Hattiesburg, MS)  
(Interactive Workshop) Dinosaur Bone Identification and 3D Modeling and Printing
- 11/3/2017** GEAR-UP (Pike County, AL)  
(Interactive Workshop) Digital Fabrication to Engage At-risk Youth
- 6/15/2017** EMH Hosts 50 Cub Scouts (Hattiesburg, MS)  
(Interactive Workshop) 3D Printed Chains and Strength of Plastic
- 4/1/2017** EMH Hosts 30 West Wortham Elementary 5th Grade (Hattiesburg, MS)  
(Interactive Workshop) Simple Circuits and 3D Modeling and Printing
- 2/17/2017** 3D Printing and Coding for AP Computer Science (Dadeville, AL)  
(Interactive Workshop) GCODE basics and 3D modeling
- 6/6–17/2016** STEM Camp (Columbus, GA)  
(Interactive Workshop) 3D Printing Superhero Badges and Coin Traps
- 10/3–4/2015** CSU Bot C.A.V.E. (Atlanta, GA)  
(Interactive Workshop) Fostering a Culture of Solution Makers, Not Solution Manuals
- 9/19/2015** Columbus Children’s Book Festival: ColumbusMakesIT (Columbus, GA)  
(Interactive Workshop) Sticker Circuits
- 6/1–14/2015** STEM Honors Camp: Columbus State University (Columbus, GA)  
(Interactive Workshop) 3D Printing Coin Mazes
- 5/13/2015** 3D Printing Demonstration: Auburn High School (Auburn, AL)  
(Interactive Workshop) From Setup to Programming to Printing
- 6/2–13/2014** STEM Honors Camp: Columbus State University (Columbus, GA)  
(Interactive Workshop) Origami Rocket Launches

## **SPEAKING ENGAGEMENTS: EVENTS FOR K-12 STUDENTS (CONTINUED)**

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- 1/25/2014** Math Masters: Columbus State University (Columbus, GA)  
(Interactive Workshop) Middle school mathematics competition
- 6/12–13/2013** STEM Honors Camp: Columbus State University (Columbus, GA)  
(Interactive Workshop) Board Games Beyond Monopoly and Apples to Apples
- 7/14–15/2011** College of Engineering: Camp KEMET - Auburn University (Auburn, AL)  
(Interactive Workshop) From graphing lines to calculus – a slice of mathematics
- 4/29/2011** College of Sciences and Mathematics - AU Explore (Auburn, AL)  
(Interactive Workshop) 5–8 grade students: Create Your Own Tessellations
- 2/26/2011** Sonia Kovalevsky Day at Auburn University Montgomery (Montgomery, AL)  
(Interactive Workshop) Knot Theory and Headbands
- 2/18/2011** Science Olympiad, Event - Compute This, Alabama Regionals (Auburn, AL)  
(Interactive Workshop) Created problems, proctored, and graded students' responses
- 2/27/2010** Sonia Kovalevsky Day at Auburn University Montgomery (Montgomery, AL)  
(Interactive Workshop) Geometry of Origami and Spongebob For High School Girls

## **CONFERENCE ORGANIZATION AND PRODUCTION**

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- Hattiesburg Mini Maker Faire** (Hattiesburg, MS, February 1, 2020)
- Hattiesburg Mini Maker Faire** (Hattiesburg, MS, February 2, 2019)
- JROTC STEM Invitational** (Hattiesburg, MS, November 2&3, 2018)
- MCTM** (Columbus, MS, October 12&13, 2018)
- VEX Robotics State (MS)** (Hattiesburg, MS, March 3&4, 2018)
- Hattiesburg Mini Maker Faire** (Hattiesburg, MS, February 3, 2018)
- Magnificent Thing Competition** (Hattiesburg, MS, February 3, 2018)
- MCTM** (Jackson, MS, October 3&4, 2017)
- JROTC STEM Invitational** (Hattiesburg, MS, September 29&30, 2017)
- Maker Educator Meetup Series** (Hattiesburg, MS, Spring 2017)
- Hackathon** (Hattiesburg, MS, April 7&8, 2017)
- Let's Grow STEAMx** (Columbus, GA, February 10&11, 2016)

## COMMITTEES AND SERVICE

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Organization functions on an: (I)=international, (N)=national, (S)=state, (L)=local, (U)=university, (C)=college, and (SU)=school unit level(s).

### University of Southern Mississippi (Fall 2016 – Current)

#### Committees

- (U) **CSME Next Steps** (Fall 2018)
- (SU) **Professor of Teaching Search Committee** (Spring 2018)
- (N,S) **Mississippi Council of Teachers of Mathematics** (Spring 2017–Current) Secretary
- (U) **Professional Education Council** (Fall 2017–Spring 2018) Secondary Mathematics
- (U) **Secondary Caucus** (Fall 2017–Spring 2018) Secondary Mathematics
- (S) **Mississippi Department of Education** (Spring 2017) Steering Committee: STEM Apps
- (S) **Mississippi Makers** (Fall 2016–Current) Steering Committee
- (I,N,S,L) **Hattiesburg Mini Maker Faire** (Fall 2016–Current) Steering Committee
- (L) **Central Creativity** (Fall 2016–Current) Steering Committee

#### Service

- (C) **ACM Student Chapter Advisor** (Spring 2019–Current)
- (C) **IEEE Student Chapter Advisor** (Spring 2018–Current)
- (SU) **Kappa Mu Epsilon Student Chapter Advisor** (Fall 2017–Current)
- (S,L) **Hub City Makers** (Fall 2016–Current) Vice President
- (U) **Eagle Maker Hub** (Fall 2016–Current) Director
- (L) **Chinese Translation for Community Members** (Fall 2016–Current)

### Columbus State University (Fall 2013 – Summer 2016)

- (U) **Intellectual Property Committee** (Fall 2015–Spring 2016)
- (SU) **Assistant Professor Search Committee** (Fall 2015)
- (S,L) **ColumbusMakesIT** (Summer 2015–Fall 2015)  
Director of Education, 3D Print and Design Expert, STEAM Ambassador
- (S,L,U) **CSU Bot C.A.V.E.** (Spring 2015–Summer 2016) Director
- (U) **Woodrow Wilson Fellowship** (Spring 2014–Spring 2016)  
Redesign a mathematics and science Master of Arts in Teaching course map
- (U) **MAST** (Fall 2013–Spring 2016) Mathematics and Science Teaching Council

### Auburn University (Spring 2009 – Summer 2013)

- (SU) **Auburn Mathematics Puzzle Challenge** (Fall 2011)  
Mathematics puzzle competition for middle school students
- (L) **Auburn Puzzle Competition** (Fall 2010) Created and tested puzzles

## MEDIA APPEARANCES AND MENTIONS

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- 10/17/2018** New digital fabrication center at USM available to students, public  
<http://www.wdam.com/2018/10/17/new-digital-fabrication-center-usm-available-students-public/>
- 10/2/2017** USM Teaching 3D Printing to Teachers **SuperTalk**  
<http://www.supertalk.fm/usm-teaching-3d-printing-to-teachers/>
- 7/10/2017** USM Leading the Way in Publicly Available 3D Printing **SuperTalk**  
<http://www.supertalk.fm/usm-leading-the-way-in-publicly-available-3d-printing/>
- 7/3/2017** Southern Miss opens makerspace where public can use 3D printer, other high-tech tools  
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