**Rebecca L. Odom-Bartel, Ph.D.**

rlodombartel@ua.edu

EDUCATION

August 2014 The University of Alabama Tuscaloosa, AL

Doctor of Philosophy Concentration: Instructional Technology

2008 The University of Alabama Tuscaloosa, AL

Master of Science Concentration: Interactive Technology

2006 The University of Alabama Tuscaloosa, AL

Bachelor of Science Concentration: Consumer Sciences

FUNDED RESEARCH EXPERIENCE

**NSF iTest (in-process)**

Title: *Expanding the Legacy: Preparing Black Young Women for AP Computer Sciences Principles*

Amount: $3,499,99 Period 10/1/23 through 10/31/27

Role: Co-PI (with Jeff Gray, Shelli Hollis, Mohammed Quazi, Raveej Swami, and Jacqueline Jackson)

**OSU Subaward**

Title: *Project 770*

Amount: $50,000Period 04/01/23 through 10/31/23

Role: Co-PI (with Crystal Franklin)

**ECEP Alliance**

Title: *Common Metrics Project*

Amount: $20,000 Period 01/01/23 through 10/31/23

**CSU Collaborative Action Research Grant**

**Title:** *Impact of Mobile Devices on High School Students Abilities*

**Amount:** $1028.04 Period 03/17/23 through 10/31/23

Role: PI

**NSF CSforAll # 2031471**

Title: ***The Cleveland Tech Talent Pipeline (CLE TTP)***

**Amount: $1,999,998 Period 11/1/2020 through 10/31/24**

**Role: PI (Former PI Debbie Jackson) (with Brian Harper and Chansu Yu)**

**NSF CSforAll** #2122882

Title: *Expanding a Statewide Pathway for CS Teacher Certification: A Curriculum Model for Secondary Education Teacher Candidates (UA SEED)*

Amount: $978,930.00     Period: 10/1/21 through 9/30/24

Role: Co-PI (with Jeremy Zelkowski and Jeff Gray)

**US Department of Education**

Title: *Pathways for Alabama Computer Science (PACS)*

Amount: $3,969,916 Period: 10/1/20 through 9/31/24

Role: Co-PI at UA (with Jeremy Zelkowski and Jeff Gray; Alabama State Department of Education as prime)

**NSF CSforAll**

Title: *Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers*

Amount: $299,903.00     Period: 10/1/17 through 10/14/21

Role: Co-PI (with Jeremy Zelkowski and Jeff Gray)

NOT-FUNDED RESEARCH EXPERIENCE

**US Department of Education**

Title: South by Computer Science

Amount: $1M

Role: Collaborative Partner for The University of Alabama College of Engineering, CS Department along with departments from The University of Texas EPIC and We\_Teach, North Caroline State, and The Citadel

**Google K-12 Education Award (Computer Science)**

Title: *Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers*

Amount: $300,000.00

Role: Co-PI (with Jeremy Zelkowski and Jeff Gray)

Date: 2016-2017

**Collaborative Research with College of Education at The University of Alabama**

Title: *Career Path Predictors of Computer Science Education*

Role: Co-PI (with Vivian Wright)

Date: 08/2016-08/2018

PUBLICATIONS

Zelkowski, J., **Odom-Bartel, R.L.,** & Gray, J. (2023- In REVIEW). Examining the Impact of TPACK and Knowledge Subcomponents in Dually Certifying Secondary Mathematics Teacher Candidates with a Computer Science add-on Endorsement. *Journal of Mathematics Teacher Education*.

Zelkowski, J., **Odom-Bartel, R.L.,** & Gray, J. (2022). Integrating computer science teacher certification into a secondary mathematics teacher preparation program: The highlights. *AMTE Connections, 32*(1), published online [https://amte.net/connections/2022/05/connections-thematic-articles-integration-mathematics-teacher-education](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Famte.net%2Fconnections%2F2022%2F05%2Fconnections-thematic-articles-integration-mathematics-teacher-education&data=05%7C01%7Cr.odombartel%40csuohio.edu%7C2c44019aa71445ade42008db58c79f84%7Cd7f3e79a943d4aceaeab209030807508%7C0%7C0%7C638201386665802980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=rPZAoTKO3kMOTi%2Fs2jdfpCAOGAr2N30ZBqv7kGpMa7I%3D&reserved=0).

Zelkowski, J., **Odom-Bartel, R. L.,** & Gray, J. (2022). Two-course sequence and modules for adding Computer Science credential into secondary mathematics teacher preparation. *Paper presented at the 2022 annual meeting of the American Educational Research Association.*Retrieved April 22, 2022, from the AERA Online Paper Repository.

**Odom-Bartel, R.,** Zelkowski, J., Gray. J. (2021). Preparing Secondary Education Mathematics Pre-service Teachers for AP Computer Science Principles: A Two-Course Design Model. Preparing Teachers to Teach Computer Science: Models, Practices and Policies (Chrystalla Mouza, Aman Yadav, and Anne Leftwich, editors), Information Age Publishing. [https://www.infoagepub.com/products/Preparing-Pre-Service-Teachers-to-Teach-Computer-Science](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.infoagepub.com%2Fproducts%2FPreparing-Pre-Service-Teachers-to-Teach-Computer-Science&data=04%7C01%7Crlodombartel%40cs.ua.edu%7C418805feeba545ebc4d508d904dd91e4%7C2a00728ef0d040b4a4e8ce433f3fbca7%7C0%7C0%7C637546175037569558%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=h5y0RqrXncOGPOF4iwLjeD1r8VUFWuLwktv7N0AdEPI%3D&reserved=0)

Gray, J., **Odom-Bartel, R.,** Zelkowski, J., Hamner, K., & Rodgers-Faris, S. (2020). A Pre-Service Pathway for Preparing Future AP CS Principles Teachers. Paper Session. *In Proceedings Technical Symposium on Computer Science Education (SIGCSE)* pp. 1127-1132., Portland, OR.

**Odom-Bartel, R.L.,** Fletcher, C., Owen, J., Gray, J., & Zelkowski, J. (2020). Preparing pre-service teacher candidates for the praxis exam: An innovative model of blended support. In Heckman, S., Monge, A., & Cutter, P. (Eds.). *Proceedings of the 51st ACTM Technical Symposium on Computer Science Education* (p. 1298). Association for Computing Machinery, New York, NY. [https://doi.org/10.1145/3328778.3372654](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1145%2F3328778.3372654&data=05%7C01%7Cr.odombartel%40csuohio.edu%7C2c44019aa71445ade42008db58c79f84%7Cd7f3e79a943d4aceaeab209030807508%7C0%7C0%7C638201386665802980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=JIhJEW2m26HmH3V3zQJZGeXAVxSpwsorxRV1KILhugI%3D&reserved=0)

**Odom-Bartel, R.** & Wright, V. (2017). Pre-Service Teachers’ Development Towards Computer Science Principles: A Career Path Predictor. In Proceedings of Society for Information Technology & Teacher Education International Conference, Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

CONFERENCE PRESENTATIONS

Hughes, C., **Odom-Bartel, R.,** Nikitina, T., (November, 2023) ChatGPT Wrote My Lesson Plan: Now What?. Workshop Session. Teacher Education Division (TED) of the Council for Exceptional Children. Long Beach, CA.

**Odom-Bartel, R**., Harper, B., Bievenue, L., Franklin, C., Kohn, C., Jackson, D., Rogers, A., (September, 2023) Ensuring Sustainability and Progression for Students Interested in Technology Careers. Poster Presentation. ACM Workshop in Primary and Secondary Computing Education Research (WiPSCE). Cambridge, U.K.

Gray, J., **Odom-Bartel, R**., Owen, J., Fletcher, C., Zelkowski, J., (March, 2020). *Preparing Pre-Service Teacher Candidates for Praxis Exam: A Model of Support*. Poster Presentation. ACM Technical Symposium on Computer Science Education (SIGSCE), Portland, OR

Gray, J., **Odom-Bartel, R**., Zelkowski, J., (March, 2020). *A Pre-Service Pathway for Preparing Future AP CS Principles Teachers*. ACM Technical Symposium on Computer Science Education (SIGSCE), Portland, OR

Gray, J., **Odom-Bartel B.,** Zelkowski, J., Hamner, K. (February, 2019). *Building a Pathway for CS Principles Teachers: A Two Course Sequence for Secondary Education Mathematics Pre-service Teachers.* Special Session on NSF Research Practice Partnership poster session, ACM Technical Symposium on Computer Science Education (SIGSCE), Minneapolis, MN

**Odom-Bartel, R**., (March, 2017). *Pre-Service Teachers’ Development Towards Computer Science Principles: A Career Path Predictor*. Brief Paper Presentation for the Society for Information Technology and Teaching Education (SITE 2016 28th International Conference, Austin, TX

**Odom-Bartel, R., Wright, V., & Rice, M.**, (January, 2017). *Case Studies in Civic Engagement*: An Online Learning Perspective. Poster Presentation for the Ethnographic and Qualitative Research Conference 29th International Conference, Las Vegas, NV.

TEACHING EXPERIENCE

**Cleveland State University, Cleveland, OH/ August 2022 – Present**

*Assistant Professor, Teacher Education, College of Education and Public Affairs*

*Director, Center for Computing Education and Instruction*

* Assist in the development of a Computer Science Education pathway
  + Research and prepare for grant funding
  + Develop curricula that complements the state and national standards for Computer Science Education
  + Assist with the ongoing efforts for Cleveland Metro School District (CMSD) with relation to STEM education for students and training for in-service teachers
* Teach courses related to Computer Science and Instructional Technology
  + CIS 151- Invitation to Computing
  + EUT 419/519 – Computer Science Methods
* Lead initiatives for Computing education and instruction with the newly formed Center for Computing Education and Instruction
  + Consulted on teacher professional development curriculum development and deployment
  + Worked with area partners to build sustainable student engagement experiences in Computing and Technology

**The University of Alabama, Tuscaloosa, AL/ August 2014-August 2022**

*Senior Instructor, Computer Science, College of Engineering*

* Teach computer literacy courses to over 1000 non-major students each semester
  + Course development and teaching of:
    - CS 323/391- Special Topics: Advanced Python for Non-Majors
    - CS 223/322/CS 391- Special Topics: Python for Non-Majors
    - CS 491/492/591/592- CS Curriculum for Secondary Math
    - CS 104- Computer Science Principles
    - CS 202- Introduction to the Internet
    - CS 391- Special Topics: Basic Concepts of Computing Technology
    - CS 345- Advanced Ethical and Legal Issues in Computing Science
    - CS 340- Ethics in Computing Science
    - CS 285- Micro-Computing Applications II
    - CS 102- Micro-Computing Applications I
  + Management of Student Assistants and Graduate Teaching Assistants
  + Supervised and assisted with the development of several new courses geared toward expanding opportunities for the broader population of campus to be engaged with CS
  + Assisted senior faculty with the advertisement and coordination of Code.org events in the Alabama region
  + Co-facilitator for the Computer Science Principles Training at The University of Alabama
    - Includes Professional Development Workshops for In-Service Teachers
  + Co-Facilitator for the University of Alabama State-wide Robotics 3rd-12th Grade Robotics Competition
  + Co-Facilitator for the University of Alabama, Computer Science, Summer Middle and High School Coding Camps
    - Middle School: Microbits
    - High School: Java Basics
  + New Course: CS 491/492/591/592- Computer Science Education Methods, supported by NSF as a Pathway for Certification for CS Education
    - Development and Production of Media Resources (Course videos; Supplemental CS Resource Interviews, etc.)
    - Creation of all curriculum artifacts for the course
    - Content expert and supervisor of online course delivery structure

PROGRAM DEVELOPMENT, COORDINATION, AND MENTORING EXPERIENCE

**The University of Alabama, Tuscaloosa, AL/ August 2015-February 2017**

*WiSE Experience Executive Board Member/ Planning Committee Co-Chair*

* Coordinated the Annual Women in STEM Experience Event
  + Nationally Recognized Guest Speakers from fields of Engineering and Science
  + Southeastern College and University initiative
  + 500 attendees with approximate budget of 50k
  + Designed correspondence and promotional material for press releases and advertisements
  + Chaired WISE Planning Committee, which was made up of several department heads across the disciplines of Science, Engineering, Mathematics, and Technology
  + Created workshop sessions, theme, and agenda
  + Coordinated on-site event with over 60 volunteers, 50 faculty assistants, 72 poster presentations, and 8 current sessions

**The University of Alabama, Tuscaloosa, AL August 2014-August 2015**

*Faculty Coordinator for Women’s Dissertation and Thesis Support Group*

* Facilitate discussion and support for female masters and doctoral students
  + Seek and schedule guest speakers that meet the groups needs
  + Develop resource material related to completion of dissertation projects
  + General organization and maintenance of the group

**The University of Alabama, Tuscaloosa, AL/ August 2013-May 2014**

*Graduate Council Dissertation Fellow and WISE Board/Tide Together Consultant*

* Coordinated the Annual Women in STEM Experience Event
  + Nationally Recognized Guest Speakers from fields of Engineering and Science
  + Southeastern College and University initiative
  + 500 attendees with approximate budget of 10k
  + Designed correspondence and promotional material for press releases and advertisements
  + Chaired WISE Planning Committee, which was made up of several department heads across the disciplines of Science, Engineering, Mathematics, and Technology
  + Created workshop sessions, theme, and agenda
  + Managed a 10 person planning committee comprised of faculty, staff, and students

**The University of Alabama, Tuscaloosa, AL / August 2011 – August 2013**

*Coordinator (Tide Together Team Mentoring Program and Graduate Ambassador Program)*

* Developed and conducted Training Workshops on Effective Mentoring Strategies and Techniques
* Built sustainable partnerships with faculty and staff throughout campus
* Coordinated Events
  + Designed promotional material
  + Planned logistics
  + Maintained budgets
  + Provided seamless communication
* Designed mentoring handbook and additional educational resources
* Created and monitored Blackboard Class for the program and its participants
* Coordinated the Graduate Ambassadors Program volunteer initiatives
* Oversaw 250 graduate students
* Designed, produced, and maintained Tide Together website, electronic weekly and semester newsletters
* Conducted and analyzed yearly assessments
* Mediated conflict related to multi-cultural issues and diversity differences
* Created the 1st multi-part event celebrating and advocating for graduate women in the STEM fields
* Co-created, coordinated, and managed a week long celebration of 1st Generation College Students for undergraduate and graduate students totaling over 5000 students.

**The University of Alabama, Tuscaloosa, AL/June 2012-December 2012**

*Educational Technology Consultant, Parent Care Readiness Assessment Program*

* Redesigned curriculum for online delivery
* Worked closely with programmer to redesign website platform
* Consulted on marketability of program
* Developed assessment and evaluation methods

**The University of Alabama, Tuscaloosa, AL / January 2009 – August 2011**

*Coordinator for Student Recruitment (Capstone College of Nursing)*

* Assisted with grant writing and research
* Organized and implemented orientation for over 150 distance learning students, faculty, and staff twice a year
* Assisted with SACs accreditation and CCNE accreditation
* Worked with the Department Chair to maintain a 300k program budget
* Developed and implemented recruitment strategies for distance professional students
* Maintained accurate recording for over 400 potential and current students using databases and analytics
* Expanded and executed plan of action and marketing strategies that increased enrollment by 1/3 in 1 academic semester
* Developed and maintained an open line of communication with three separate colleges on campus, community colleges in Alabama, and multiple national organizations associated with Nursing Education
* Supervised office staff and student workers in office tasks and special projects as they arose
* Coordinated and developed program knowledge, policy and procedures, and strategic planning that promoted a student oriented program
* Evaluated and recommended vendors for exhibition, marketing, purchasing, and recruitment purpose
* Developed and administered web orientations using Wimba each fall and advised faculty on best practices for their Blackboard Courses
* Counseled faculty on distance education best practices and pedagogy in the development of new course material
* Oversaw development of new marketing plans, pedagogical techniques, policy implementation, and strategic planning

DISEERTATION SERVICE

* 2021-Present, Outside Committee Member

Jill Westerlund

* 2015-2018, Outside Committee Member

Tracy Hinton

ACADEMIC SERVICE

* Expanding Computing Education Pathways (ECEP) Alliance State Leadership Team, 2022-Present
* NCWIT Ohio Aspirations in Computing Banquet Planning Committee, 2022-Present
* College Board, Educational Testing Services, Advanced Placement Computer Science Principles Reader, June 2023
* NSF CISE and Workforce Division, Reviewer, Spring 2023
* NCWIT Aspiration in Computing National Reviewer, Fall 2022
* PACS: Pathways for Alabama Computer Science Leadership Team, Fall 2019 - Present
* Session Moderator for App Challenge Judging “K-12 Computer Science in Alabama”, Governor’s Computer Science Summit, Prattville AL, April 26, 2021
* “Alabama K-12 Success Stories”, Session Presenter, Governor’s Computer Science Summit, Prattville AL, April 26, 2021
* “Preparation for the ETS 5652 Praxis Exam, facilitated a 6-week online course that prepared 40 Alabama secondary teachers for the CS praxis exam” College of Education Pre-Service SEMA students. Six-week online course. May-July 2019 and 2020
* “Preparing for the Alabama Robotics Contest,” Alabama Black Belt Bridge Builders, All-day Workshop, February 2, 2019.
* Session Leader “K-12 Computer Science in Alabama, “ Governor’s Computer Science Summit, Montgomery AL, March 14, 2018
* “Hour of Code” School Visits: Northridge Middle School, Woodland Forest Elementary School, Northport Elementary School, Eastwood Middle School, (December 2017, December 2018, **expected**-December 2019)
* Weekly Robotics Training Classes: Spring 2017, Spring 2018
* Workshop Leader for Hour of Code in Tuscaloosa City Schools

Fall 2017

* Alabama Robotics Competition Volunteer Judge

Spring 2016

* Alabama Technology Student Association Annual State Leadership Conference

Technology Judge

Spring 2015, Spring 2016

* Reviewer for Journal of Interactive Online Learning

2012- present

* Reviewer for the Journal of Online Learning Research

2015- present

* 2016 WiSE Conference

Venue and Reception Logistics Committee

2015-2016

Committee Chair

* “1st Generation Graduate Student Experience”

Guest Panelist

Spring 2015 First Generation College Student Appreciation Week

* “Surviving the Dissertation”

Guest Speaker

Fall 2014 Dissertation Bootcamp

Graduate Student Services, The University of Alabama

* “Implementing Technology in the Classroom”

Guest Lecturer

EDY223: Developing Child in the 21st Century

Birmingham Southern College

Spring 2014

* The University of Alabama Graduate Student Services

Gradapalooza Planning Committee

Spring 2014

* The University of Alabama Student Health Committee

Member

Fall 2013-Fall 2018

* Paper Reviewer for the Society for Information Technology and Teacher Education 2014 Conference
* The University of Alabama WISE Board

Advisory Board for Women in STEM at UA

Chair: August 2012- January 2014

* How to Get Connected: Mentoring Relationships and Academic Networking

New Graduate Student Orientation

The University of Alabama Graduate Student Services

Fall 2013

* “How would the World Look: What if”

UA Feminist Brown Bag Series: Lecture Focusing on Women in STEM Disciplines

The University of Alabama Women’s Resource Center

Spring 2012

* Graduate Student Services Spring 2012 Orientation

The University of Alabama

Guest Speaker

Spring 2012

* 1st Generation College Students Celebration Week

The University of Alabama Student Affairs

Planning Committee

Co-Chair: December 2012-March 2013

* Graduate Student Association Research Conference

The University of Alabama

Conference Planning Committee

Fall 2012

* Tide Together and Graduate Parenting Support Informational Video

The University of Alabama Graduate School

Planning and Development Committee

Committee Chair: June 2012-October 2012

* How to Get Connected: Mentoring Relationships and Academic Networking

New Graduate Student Orientation

The University of Alabama Graduate Student Services

Fall 2012

* How to Get Connected: Mentoring Relationships and Academic Networking at a Distance

New Distance Graduate Student Orientation

The University of Alabama Graduate Student Services

Fall 2012

* Parent Care Readiness Assessment Program

The University of Alabama School of Social Work

Development Member: Summer 2012

Instructional Technology Expert

* AERA Proposal Process for Newbies

The University of Alabama, College of Education, Department of Educational Leadership, Policy, and Technology Studies

Panel Presentation

Summer 2012

* Technology, Education, and Research Conference

The University of Alabama, College of Education, Department of Educational Leadership, Policy, and Technology Studies

Conference Planning Committee

Communications and Design Co-Chairs

Spring 2012

* Technology K-12

The University of Alabama, College of Education, Department of Curriculum and Instruction

Guest Lecturer

CSE 390 Fall 2011

* American Universities Graduate Student Panel

The University of Alabama, College of Education

Panel Presenter

AHE 250 Fall 2011

* McNair Visitation Day Student Services Panel

The University of Alabama Graduate School

Tide Together representative

Fall 2011

* How to Get the Most Out of Your Mentor Relationship

New Graduate Student Orientation

The University of Alabama Graduate Student Services

Fall 2011

* The University of Alabama Interdisciplinary Steering Committee Nurse Educator Program

Committee Member: 2009-2011

PROFESSIONAL DEVELOPMENT

* CISE RPP Meeting, sponsored by NSF, Atlanta, GA June 2023
* CSforAll: RPP PI Meeting, sponsored by the American Institutes for Research, Washington D.C. September 2019
* Computer Science Teachers Association Annual Conference, July 2019 Phoenix AZ
* ACM Small Interest Group for Computer Science Education, March 2018, Boston, MA
* The University of Alabama Graduate School Writing Retreat 2014
* The UA Systems Scholars Institute 2013
* Alabama Educational Technology Conference 2013
* 2012 Mentoring Conference UNM Mentoring Institute
* The UA Systems Scholars Institute 2012
* Alabama Educational Technology Conference 2012

NATIONAL MEMBERSHIPS

* Association for the Advancement of Computing in Education (AACN) 2011-Present
* Association for Computing Machinery
* Computer Science Teachers Association

AWARDS AND RECOGNITIONS

MSERA In-Progress Research Award

November 2013

The University of Alabama Graduate School Honoree for the 2013 Capstone Convocation

August 2013

Alpha Epsilon Lambda Honor Society

Member since 2007

Phi Theta Kappa Honor Society

Member since 2006

Phi Kappa Phi Honor Society

Member since 2002

COMMUNITY ACTIVITIES

K-12 Education

* Robotics Facilitator for Huntington Place Elementary School (Grades 3rd-4th) (Spring 2022)

The University of Alabama (UA)

* “Computer Science Opportunities at UA” Echols Middle School (October, 2016)
* Tide Together Faculty Mentor: 2015-2016
* Wise Executive Board: 2015-2016
* The University of Alabama Graduate Student Association Executive Vice President: Fall 2011- Summer 2014
* Tide Together Peer Mentor Academic: 2013-2014
* Graduate Student Parent Organization President: Fall 2013- Summer 2014
* UA Equal Opportunity Committee, Student Member: 2012-2013
* Alpha Epsilon Lambda President: Fall 2010- Summer 2013

Society for Information Technology and Teacher Education (SITE)

* Equity & Social Justice SIG: 2013-2017
* Technological, Pedagogical, and Content Knowledge SIG: 2013-2017
* Distance/Flexible Education SIG: 2013-2017
* Graduate Education & Faculty Development SIG: 2013-2017
* Graduate Student Network SIG: 2013-2015