Jialing Wu

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Education

The Ohio State University, College of Engineering, *Columbus, OH, U.S.A.* — Expected May 2028
Ph.D. in Engineering Education

Vanderbilt University, Peabody College, *Nashville, TN, U.S.A.* — May 2024
Master of Education, International Education Policy and Management

Shanghai University, School of Mechanical Engineering and Automation, *Shanghai, China* — July 2017
Bachelor of Engineering, Mechanical Engineering

Publications

Submitted

- Advancing Equity: Exploring the Experiences of Transgender and Gender Non-Conforming Students in a Pre-College Engineering Course (WIP) — 2025 ASEE
- Parents' Knowledge, Attitude and Behavior on Pre-college Engineering Education Courses (WIP) — 2025 ASEE

Accepted

- Darling-Aduana, J., Heinrich, C., Noonan, Wu, J., & Enriquez, K. (2025). Failing to Learn from Failure: The Facade of Online Credit Recovery Assessments. *2025AERA*
- Wu, J., & Dalal, M. (2024). High school students' perspectives on pre-college Engineering Education Courses (fundamental). *2024 ASEE*
- Wu, J., Leger, N., & Klein-Gardner, S. (2024). High school students' perspectives on mathematical modeling in the Engineering Design Process (RTP). *2024 ASEE*

Research and Work Experience

e4usa+FIRST, *Columbus, OH, U.S.A.* — Aug. 2025 - Present
Graduate Research Assistant
(Supervisor: Dr. Adam Carberry)
The e4usa+FIRST program combines the *Engineering for US All (e4usa)* curriculum with *FIRST Robotics*, offering hands-on engineering for college and high school students.

- Conduct project preparation, including curriculum development, teacher professional development, and research design.

Howard Hughes Medical Institute (HHMI), *Maryland., U.S.A.* — May. 2024-Aug. 2024
Assessment Intern, Science Education
The BioInteractive team at HHMI (Howard Hughes Medical Institute) creates engaging, science-based educational resources that empower educators to teach complex biological concepts through real-world examples and interactive media.

- Developed a comprehensive HTML codebook with 9 chapters and 25 sections to guide the content team in designing Canvas course pages. The codebook covers HTML coding for text formatting, hyperlinks, multimedia, call-out boxes, interactive games, and other page elements.
- Monitored teacher enrollment data for an inclusive teaching course, recording key information such as teacher backgrounds, course enrollment dates, and participation duration.
- Utilized UDOIT to perform accessibility audits on course content and developed an issue handbook to provide content editors with actionable guidelines for improving accessibility.

Engineering for Us All (e4usa), *Nashville, TN, U.S.A.* — June 2023-July 2024
Graduate Research Assistant
(Supervisors: Dr. Stacy Klein-Gardner, Dr. Medha Dalal)
Engineering for Us All (e4usa) is a first-of-its-kind, national initiative designed to introduce engineering design principles to a new generation of students.

- Investigated high school students' perspectives on engineering education courses; analyzed the relationship between students' backgrounds and career choices; conducted qualitative analysis on open-ended responses from 2022-2023 post-test surveys, developed codebooks, and performed statistical tests to compare pre- and post-test data.
- Explored students' opinions on using mathematical modeling tools in engineering design; analyzed focus group data and compared thematic findings with cognitive load theory to identify potential improvements in instructional design.
- Submitted two conference papers for the 2024 ASEE, led research group meetings, managed project timelines, and delivered presentations at conferences.
- Revised Unit 2 curriculum, changing the topic from water filters to wind turbines; revamped 5 lessons and 9 activities, adapted 8 lessons and 7 activities, and overhauled teaching slides and assignments. Redesigned MATLAB code and associated activities; collected teacher feedback during curriculum pilots and the new semester.
- Drafted memos for facilitators in summer teacher professional development programs, ensured proper formatting of Google forms, and verified the accuracy of links for asynchronous activities on the Canvas

Vanderbilt University, Peabody College, *Nashville, TN, U.S.A.*   Sept. 2023-May 2024
Graduate Research Assistant
(Supervisors: Dr. Carolyn J. Heinrich, Dr. Jennifer Suzanne Darling-Aduana)
The project investigates whether high school students can obtain answers to online exam questions through online searches and explores the potential impact of such exams on the labor market.
- Search over 1400 questions in OCR files and papers from the Edmentum test; document Bloom's taxonomy of questions and search results from Google, charging platforms, and ChatGPT; verify if the platforms' answers
- Collaborate with supervisors to ensure inner coding reliability, identify special categories for questions, and refine the code definitions and standards for the coding process

Shanton Way Executive Search Co., Ltd., *Shanghai, China*   July 2017-July 2022
Senior Consultant
An Asia-based headhunting firm with offices in Hong Kong, Singapore, and Shanghai (headquartered).
- Communicated with clients and educational companies to understand their needs for academic and non-academic positions including principals, department heads (e.g., STEM outreach center Director), and commercial team members including COO, Admission and Marketing Directors and Financial Directors
- Collaborated with clients in the fields of consulting, finance, industry, internet, and pharmaceutical; recruited senior management personnel, including CEOs, CTOs and engineering professionals
- Investigated information on clients' local and national counterparts and determined search methods
- Recruited potential candidates on LinkedIn and other recruiting platforms; managed a candidate pool of over 1,500 people in international schools, bilingual schools and K-12 educational companies via phone calls or social media
- Marketed clients' organization and hiring positions and assessed candidates' fit based on their career plans and goals
- Interviewed and evaluated candidates by exploring their experience and skills in dealing with policy and cultural conflicts in international environments, recommending suitable candidates to clients according to their demand

AIQUZHI Volunteer Group, *Shanghai, China*   July 2017-July 2022
Program Coordinator and Teacher
AIQUZHI seeks to build communities among urban youth while providing educational support for migrant children.
- Designed a questionnaire to assess the operational status of all projects, including activities, frequency, and platforms; utilized online survey tools to gather information monthly and produced annual reports
- Coordinated and implemented over 40 project-based workshops for migrant children in elementary schools from 2017 to 2020; taught how to reuse old materials in daily life to make paper models, bags, stationery boxes, and decorations
- Served over 110 children, guided students to reflect on environmental protection issues, assisted them in completing independent and cooperative projects to help build positive social relationships with peers and volunteer teachers
- Recruited 80 volunteer teachers, interviewed, and selected excellent candidates by considering their communication skills, hands-on ability, and volunteer experience, etc.
- Trained over 50 volunteer teachers, introduced the identity and background of migrant children, and shared manual skills used in formal classes to enhance teachers' ability to interact with rural-urban children
- Organized weekly wrap-up meetings to collect feedback on handwork lessons from volunteer teachers and published 50 follow-up articles based on the information on social media, resulting in over 3,000 views

Leadership and Service

- e4usa Program Coordinator; Wind Turbine Competition at IEEE-ECCE conference for high school students (2023)
- Founding Member and Treasurer; International Mentorship at Peabody (iMAP), Vanderbilt University (2023-2024)
- Mentor; Peabody Peer Career Mentor Program, Vanderbilt University (2023-2024)
- Mentor; Peabody International Students and Affairs, Vanderbilt University (2023-2024)

Scholarships and Awards

- Scholastic Achievement Scholarship, Vanderbilt University, Peabody College (2022)
- University Scholarship for Academic Excellence, Shanghai University (2015, 2014)

Skills

- Technical: Stata, R, MATLAB, CAD, SOLIDWORKS
- Languages: Mandarin (native), English (proficient)