

Miaoya Zhong

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EDUCATION

Stanford University, Stanford, CA (online)	Sept 2022 to Present
Graduate Certificate: Introductory Programming, Foundations in Computer Science	Current GPA: 4.12/4.0
Harvard University, Cambridge, MA	Sept 2021 to May 2022
Master of Education in Learning Design, Innovation, and Technology	GPA: 4.0/4.0
University of Wisconsin-Madison, Madison, WI	Sep 2017 to Dec 2020
Bachelor of Science in Elementary Education-Early Childhood & ESL	GPA: 3.93/4.0
Certificate: Education and Educational Services	
Awards: Graduate with Distinction , Dean's list Fall 2017-Fall 2020, School of Edu Scholarship, HGSE Grant	

SKILLS

- **Programing Language:** Python, C++, C, Java, HTML, CSS, JavaScript, Ink, Processing, R, Scratch, MIT App Inventor, Google Blockly, LEGO Mindstorms & WeDo2.0, GoGo Board
- **Technical Skill:** OnShape, CorelDRAW, Laser Cutting, 3D printing, Unity (C#), Roblox Studio (Lua), Adobe Photoshop, Microsoft Suite, Google Suite
- **Languages:** Mandarin (Native), English (Proficient), Cantonese (Intermediate)

RESEARCH EXPERIENCE

Research Assistant in Biomimetics and Dexterous Manipulation Lab	June 2024 to Present
Stanford University, CA	Advisor: Mark Cutkosky
<ul style="list-style-type: none">• Designed and implemented a Fiber-Bragg-Grating-based sensor for the OceanOneK Robot's hands.• Improved the hand fabrication process for the OceanOneK Robot, employing a combination of 3D printing and casting techniques.• Contributed to the design of a whisker-inspired tactile sensor for underwater robots, showcased at the Stanford Robotics Center Launch (Demo Site/Project Site/Media Coverage).• Conducted and designed experiments to collect data using force-torque sensors and interrogator.• Implemented machine learning algorithms to train predictive models for force and contact status and developed data visualization.	

Research Assistant in Department of Educational Psychology	January 2019 to Dec 2020
University of Wisconsin-Madison, WI	Advisor: Martina A. Rau, Mitchell Nathan
<ul style="list-style-type: none">• Conducted experiments and contributed to participant recruitment for educational psychology studies.• Transcribed participant interviews and encoded responses to analyze student feedback.• Collected and analyzed data on representational competencies in educational video games for astronomy learning (rau-lab).• Authored literature reviews focused on mathematical pedagogy.• Supported the design of experiments investigating representations in teaching mathematical theorems (MAGIC Lab).• Presented research at the Undergraduate Research Symposium with poster "<i>The Significance of Objects, Icons, and Symbols in Mathematics Learning.</i>"	

TEACHING EXPERIENCE

Computer Science Teacher in Quarry Lane School	Aug 2023 to Present
Dublin, CA	
<ul style="list-style-type: none">• Teach AP Computer Science Principles (AP CSP) and Middle School Computer Science, foster computational thinking, interest in Computer Science, and a strong foundation in programming.• Design and implement a customized curriculum for students in Grades 7-12, tailoring instruction to meet the diverse learning needs and academic goals of each student.• Lead Game Design club, facilitate a homeroom, and chaperone debate and speech tournaments as a judge, enhancing student engagement and promoting a collaborative learning community.	

Teacher in Stanford Madera Grove Children's center

Jun 2022 to Jun 2023

Stanford, CA

- Utilized classroom materials to **implement STEAM activities** and promote an environment conducive to age-appropriate levels of development, interests, and special needs of the children.
- Created **documentation** of student work such as portfolios and wall display.
- Maintained an open line of **communication** with parents, provide appropriate information, and share relevant feedback from parents with teacher team.

Robotic Programming Teacher in TCTM Kids IT Education Inc. (NASDAQ: TCTM)

Feb 2021 to Jul 2021

Shenzhen, China

- Taught Lego construction and **robotic programming** with Scratch, Lego Mindstorms, Lego WeDo 2.0, and Python in **Grade Pre-8**
- Worked on developing the product exhibitions and activity design, **assisted in training new teachers.**

Practicum

Sep 2019 to Dec 2020

Hugel Elementary School, Kindergarten, WI

Milele Chikasa Anana Elementary School, TK, WI

Midvale Elementary School, Second grade, WI (online)

- Taught lessons in rotating centers including **reading, writing, math, science, art and crafting.**
- Led the daily morning activity for class. Designed unit of lesson plans with a focus on **literacy learning** and foregrounding **social justice.**
- Observed and provided individualized assistance for **children with disabilities** and **emergent bilingual students.**

Volunteer in MSCR Safe Haven After-school program

Feb 2018 to May 2019

Emerson Elementary School, WI

- Read and discussed stories with children to **facilitate social emotional learning**
- Created math problems and **instructed math**
- Assisted teachers to help children with special needs