

EDUCATION	Master of Arts, Mathematics <i>University of California–Santa Cruz, Santa Cruz, CA</i> Thesis: “Stable ∞ -categories and their Homotopy Categories”	June 2022
	Bachelor of Sciences, Physics & Mathematics <i>University of Iowa, Iowa City, IA</i>	May 2009
WORK EXPERIENCE	Adjunct Faculty, Mathematics <i>CUNY City Tech (NYC College of Technology)</i> <ul style="list-style-type: none">Fall 2024:<ul style="list-style-type: none">MAT 1275 (College Algebra and Trigonometry)MAT 1375 (Precalculus)	August 2024 - present
	Expert AI Data Trainer <i>Invisible Technologies, Inc.</i> <ul style="list-style-type: none">Train AI for various projects involving Mathematics knowledge, reasoning, research skills, and othersUse Reward Modeling (RM) and Reinforcement Learning from Human Feedback (RLHF) to train AI models	July 2024 - present
	Remote Competition Math Teacher <i>Think Academy, Inc.</i> <ul style="list-style-type: none">Lesson plan weeklyTeach weekly classes for competition Math (AMC 10, AMC 12)Grade assignments and provide feedback for students	May 2024 - present
	AI Trainer and Reviewer <i>Outlier (Scale AI)</i> <p>A list of projects worked on (project titles in quotes are not the official project titles, but just meant to describe the gist of the projects):</p> <ul style="list-style-type: none">“Reasoning Improvement” (April 2024 - July 2024):<ul style="list-style-type: none">Craft questions to intentionally cause the AI model to make errors in reasoning or problem-solvingIdentify where in the problem-solving process errors were made, what the errors were, and fix them“Advanced Mathematics Project” (Feb 2024 - April 2024):<ul style="list-style-type: none">Formulate creative and original prompts about topics of undergraduate to graduate level Mathematics to train an AI education botEdit AI-generated responses for accuracy, clarity, typesetting“K-12 STEM Education Project” (May 2023 - Feb 2024):<ul style="list-style-type: none">Interface with AI chatbot based on various guidance (e.g. explain a concept, solve this problem, ...) relating to K-12 STEM topicsEdit chatbot answers to be factual, thorough, and grammatically correct, as well as following a style guide (L^AT_EX, etc.)	April 2023 - July 2024

- Review submissions of exchanges with the bot and judged based on adherence to guidance, quality of responses
- “AMC12 Math Creation Project” (April - May 2023):
 - Reviewed AI-generated questions for the AMC12 Mathematics contest
 - Checked for mathematical soundness, accuracy, novelty, \LaTeX formatting
 - Rewrote when necessary and provided feedback

Faculty Diversity Internship Program

January - May 2023

West Valley - Mission Community College District, San Jose, CA

- Paired with a Mathematics faculty mentor, observed his courses over the course of Spring semester, and met weekly to discuss various aspects of teaching Math at a community college
- Attended professional development sessions on various topics related to teaching at a community college (e.g. DEIAB, planning a course, curriculum, assignments, grading, culture-building, student engagement, technological resources, the hiring process, etc.)

Lead Teaching Assistant

November 2020 - Mar 2022

U.C. Santa Cruz, Mathematics Department, Santa Cruz, CA

- Classes: MATH 19A, 19B, 23A, various quarters
- Managed 3-5 other TA's: organize a weekly schedule of sections and office hours; divide grading, reviews and other duties; communicate between TA's, professors, and students
- Tech support for other TA's and students (Zoom, Canvas, Google suite, online e-book/HW portal (MacMillan Launchpad, Achieve))
- Organized, moderated, and facilitated participation in online discussion forums for students (Piazza, Discord Slack, Zulip, etc.)

Teaching Assistant

November 2019 - June 2022

U.C. Santa Cruz, Mathematics Department, Santa Cruz, CA

- Classes (by quarter, F := Fall, W := Winter, Sp := Spring, Su := Summer):

– MATH 19A (Calculus for STEM)	F 20, W 21
– MATH 19B (Calculus for STEM)	Sp 22, F 19, F 21
– MATH 23A (Vector Calculus)	W 22, W 20, Sp 20, Sp 21
– MATH 24 (Ordinary Differential Equations)	Su 21
– CMMU 30 (Numbers and Social Justice)	Su 20
- Held section 1-3 times a week, and weekly office hours
- Graded homework, quizzes, and exams

Math Consultant

September - October 2021

Code and Cursor, Oakland, CA

- Collaborated on adapting a version of the “Boids” program (a bird flocking simulator) in the Processing language, for use in an art installation at Chicago O’Hare Airport
- Worked as a team to design, build, and troubleshoot a polished, working program, using math/physics knowledge (vectors, mechanics, etc.) to develop a life-like bird flocking motion
- Wrangled data, balancing aesthetics without losing statistical meaning, and to output intelligible information (positions, sizes, units) for use in assembling the physical exhibit

Recreation Leader I

June - August 2019

Oakland Parks, Recreation & Youth Development, Dimond Park, Oakland, CA

- With other Rec Leaders and Aides, lead groups of 15-20 kids (ages 5-10) through summer camp activities such as: outdoor and indoor games, hikes, educational activities, arts and crafts, visiting guests, field trips, etc.
- Developed and led educational activities involving Math and Reading instruction that were also fun, engaging summer camp activities
- Set up, served, and cleaned up breakfast, lunch, supervised free-play, and facilitated use of park equipment and facilities

After-School Education & Safety (ASES) Tutor August - December 2018
Oakland Charter Academy, Oakland, CA

- Led After School tutoring classes and Study Hall daily
- Organized and taught an enrichment Chess & Puzzles class
- Substitute ASES Supervisor (administrate ASES program: transition students and teachers from end-of-school to snack-time to ASES program, monitor campus to make sure all after-school programs ran smoothly)

Paraprofessional Tutor May 2016 - August 2018
Oakland Charter Academy, Oakland, CA

- Tutored small groups, both in-class and out of class, during the school day
- Collected student data to inform targeted academic support and intervention
- Substituted for teachers of all grade levels (6th - 8th grade) and subjects
- Led after-school tutoring and enrichment classes daily
- Helped set up and organize community events such as Posada, Harvest Festival, Winter/Spring Formals, and 8th grade graduation

Engineering Tech September 2014 - May 2016
Contra Costa County Public Works Dept, Martinez, CA

- Used GIS (mapping software) to screen industrial sites for pollutants
- Created and maintained spreadsheets for street sweeping maps, schedules, and collected trash level data
- Communicated with public and other departments by email and phone regarding municipal operations and illegal dumping complaints
- Set up and conducted public outreach at community and school events for education of clean water and watershed programs

**UNPAID
EXPERIENCE**

Directed Reading Program Mentor March - June 2022
*U.C. Santa Cruz, Mathematics Department
 Santa Cruz, CA*

- Paired with an undergraduate student, with whom I developed a suitable reading/research plan that was accessible and relevant to their interests
- Met weekly to gauge progress, provide readings, structure, perspective, feedback, and mentorship
- Assisted the student in developing a talk about the readings given at the end of the quarter

Tutor November 2019 - March 2020
*Prison Inmate Education Project
 Santa Cruz County Jail, Santa Cruz, CA*

- Tutored inmates at the Santa Cruz County Jail: implemented diagnostics to determine level of education, collaborated with students to set goals and a plan of study, and taught Pre-Algebra and Algebra

**TRAINING &
AWARDS**

Outstanding T.A. Award
U.C. Santa Cruz, Mathematics Department

May 2022

Inclusive Teaching Workshop September 2019
Center for Innovation in Teaching and Learning (CITL), U.C. Santa Cruz

AMPS Summit Summer 2016 - 2017 - 2018
Amethod Public Schools, Richmond, CA

- Yearly summer meeting in Richmond, CA, of staff from all campuses of Amethod Public Schools
- Attended workshops for inclusive teaching practices, new technologies and resources, networking with staff from other campuses, etc.
- Collaborated with staff in the same subject/grade level on lesson planning for the upcoming school year