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| EDUCATION | M.A. Mathematics | June 2022 | | | | | | | | | | |
| | University of California–Santa Cruz, Santa Cruz, CA Thesis: “Stable ∞ -categories and their Homotopy Categories” | | | | | | | | | | | |
| | B.S. Physics, Mathematics | June 2009 | | | | | | | | | | |
| | University of Iowa, Iowa City, IA | | | | | | | | | | | |
| WORK EXPERIENCE | AI Trainer + Reviewer | May 2023 - present | | | | | | | | | | |
| | “K-12 STEM Education Project”, Scale AI | | | | | | | | | | | |
| | <ul style="list-style-type: none">Interacted with an AI chatbot based on various guidance (e.g. explain a concept, solve this problem, ...) relating to various concepts from K-12 STEM courses, and then following up responses with subsequent prompts based on certain guidanceEdited chatbot answers to be factual, thorough, and grammatically correct, as well as following a style guideAs a reviewer: reviewed submissions of exchanges with the chatbot and judged based on adherence to guidance and quality of responses, edited when necessary/possible | | | | | | | | | | | |
| | AI Trainer, Math | April 2023 - present | | | | | | | | | | |
| | “AMC12 Math Creation Project”, Scale AI | | | | | | | | | | | |
| | <ul style="list-style-type: none">Reviewed example questions for the AMC12 Mathematics contestChecked for mathematical soundness, accuracy, novelty, LaTeX formattingRewrote when necessary and provided feedback | | | | | | | | | | | |
| | Directed Reading Program Mentor | March - June 2022 (Spring quarter) | | | | | | | | | | |
| | U.C. Santa Cruz, Mathematics Department, Santa Cruz, CA | | | | | | | | | | | |
| | <ul style="list-style-type: none">Paired with an undergraduate student mentee, with whom I developed a suitable reading/research plan that was accessible and relevant to their interestsMet weekly to gauge progress, provide readings, structure, perspective, feedback, and mentorshipAssisted the mentee in developing a talk about the readings given at the end of the quarter | | | | | | | | | | | |
| | Teaching Assistant | November 2019 - June 2022 | | | | | | | | | | |
| | U.C. Santa Cruz, Mathematics Department, Santa Cruz, CA | | | | | | | | | | | |
| | <ul style="list-style-type: none">Classes (by quarter, F := Fall, W := Winter, Sp := Spring, Su := Summer):<table><tr><td>– MATH 19A (Calculus for STEM)</td><td>F 20, W 21</td></tr><tr><td>– MATH 19B (Calculus for STEM)</td><td>Sp 22, F 19, F 21</td></tr><tr><td>– MATH 23A (Vector Calculus)</td><td>W 22, W 20, Sp 20, Sp 21</td></tr><tr><td>– MATH 24 (Ordinary Differential Equations)</td><td>Su 21</td></tr><tr><td>– CMMU 30 (Numbers and Social Justice)</td><td>Su 20</td></tr></table>Held section 1-3 times a week, and weekly office hoursGraded homework, quizzes, and exams | – 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 | |
| – 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 | | | | | | | | | | | |

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.)

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

Contractor 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.
- 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

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| | Engineering Tech | September 2014 - May 2016 |
| | <i>Contra Costa County Public Works Dept, Martinez, CA</i> | |
| | <ul style="list-style-type: none"> • 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 | |
| TALKS, ORGANIZING | “What (the Heck) is a Higher Category?” | May 2, 2022 |
| | <i>UC Santa Cruz, Mathematics Department Graduate Colloquium</i> | |
| | “What (the Heck) is a Spectrum?” | February 14, 2022 |
| | <i>UC Santa Cruz, Mathematics Department Graduate Colloquium</i> | |
| | Community Category Theory Seminar | Winter - Spring 2022 |
| | <i>UC Santa Cruz</i> | |
| | <ul style="list-style-type: none"> • Co-organized (with 2 other grad students) this unofficial learning seminar for graduate and undergraduate students. • In Winter 2022, gave lectures and supervised weekly problem sessions. • In Spring 2022, a weekly problem session. | |
| CONFERENCES, SEMINARS, SCHOOLS, WORKSHOPS... | Faculty Diversity Internship Program Intern | January - May 2023 |
| | <i>West Valley-Mission Community College District, San Jose, CA</i> | |
| | Summer School on Chromatic Homotopy Theory and Higher (Infinity-Categorical) Algebra | Aug 15-26, 2022 |
| | <i>(online) https://iwoat.github.io/</i> | |
| | PCMI Graduate Summer School | July 12-23, 2021 |
| | <i>(online) IAS Park City Mathematics Institute</i> | |
| | <ul style="list-style-type: none"> • Week 1 : “An Introduction to Motivic Homotopy and its Applications” • Week 2 : “Illustrating Mathematics” | |
| | ¡Viva Talbot! 2021 | June 1-6, 2021 |
| | <i>(online) MIT</i> | |
| | Cornell Topology Festival | May 20-21, 2021 |
| | <i>(online) Cornell University</i> | |
| | Graduate Student Topology & Geometry Conference | April 9-11, 2021 |
| | <i>(online) Indiana University - Bloomington</i> | |
| | Dualities in Topology and Algebra | February 1-13, 2021 |
| | <i>(online) International Centre for Theoretical Sciences</i> | |
| | Inclusive Teaching Workshop | September 2019 |
| | <i>Center for Innovation in Teaching and Learning (CITL), U.C. Santa Cruz</i> | |
| | AMPS Summit | Summer 2016 - 2017 - 2018 |
| | <i>Amethod Public Schools, Richmond, CA</i> | |