

D. Zack Garza

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EDUCATION	University of Georgia,	Aug 2019 – Present
	▪ Ph.D. in Mathematics (<i>In Progress</i>)	
	University of California, San Diego	Aug 2015 – Jun 2018
	▪ B.S. in Mathematics, Computer Science minor.	
	University of California, Berkeley	Sep 2014 – Jun 2015
	▪ Concurrent Enrollment	
	Sierra College	Sep 2011 – Jun 2014
	▪ A.A. in Mathematics	
	▪ A.S. in Physics	
	▪ A.A. in Fine Arts	
HONORS & AWARDS	▪ UGA Capturing Science Contest, 2nd Place	2020
	▪ Louise Hoffmasterand and Frank R. Etchberger Graduate Scholarship (×2)	2019 – 2021
	▪ UC San Diego Academic Enrichment Program Undergraduate Research Scholarship (<i>Declined</i>)	2018
	▪ Diana C. Miles Scholarship	2017 – 2018
	▪ Errett Bishop Scholarship	2016 – 2017
	▪ Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship	2016 – 2017
	▪ Provost Honors (Muir College, UC San Diego)	2015 – 2016
TEACHING & OUTREACH	Teaching	
	▪ (<i>Planned</i>) Instructor of Record, Calculus I (Math 2250, 2 Sections), UGA	Fall 2021
	▪ Instructor of Record, PreCalculus (Math 1113, 1 Section), UGA	Fall 2020
	▪ Instructor of Record, PreCalculus (Math 1113, 2 Sections), UGA	Spring 2021
	▪ Training: Graduate Teaching Seminar, UGA	Fall 2019 - Present
	Grading and Tutoring	
	▪ Graduate Mathematics Assistant, Tutoring Program (UGA)	Fall 2019 – Spring 2020
	▪ Recitation Leader: Calculus I (Math 2200, UGA)	Fall 2019
	▪ Grading	
	• Real Analysis (Math 4100/6100, UGA)	Fall 2020
	• Foundations of Geometry (Math 5200/7200, UGA)	Spring 2020
	• Differential Geometry (Math 4250/6250, UGA)	Spring 2020
	• Algebra for Middle School Teachers (Math 5035, UGA)	Spring 2020
▪ Private Tutoring	2014 – Present	
• 20+ student clients.		
• Subjects: Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability, Combinatorics		
Extracurricular Organizations		
▪ President, Society of Undergraduate Mathematics Students (UCSD)	2016 – 2018	
▪ Officer, Mathematics Club (Sierra College)	2013 – 2014	
SELECTED TALKS	▪ Homotopy Groups of Spectra (Stable Homotopy Seminar, Online)	Mar 2021
	▪ Seminar in Floer Homology (Multiple Talks)	Fall 2020
	▪ Classification Theorems in Topology and Geometry (Mock AMS, UGA)	Jul 2020
	▪ Homotopy Groups of Spheres (Graduate Student Seminar, UGA)	Apr 2020
	▪ Zeta Functions and the Weil Conjectures (CRAAG Arithmetic Geometry Seminar, UGA)	Feb 2020

	<ul style="list-style-type: none"> ▪ The Arnold Conjecture: Periodic Orbits in Symplectic Geometry (Graduate Student Topology, Seminar, UGA) Feb 2020 ▪ Poincaré Conjectures and the Kervaire Invariant One Problem (Graduate Student Topology Seminar, UGA) Oct 2019 ▪ Spectral Sequences: A Primer (Graduate Student Seminar, UGA) Oct 2019 ▪ Comparison Theorems in Cohomology: Singular, Simplicial, de Rham, and Čech Sep 2019 ▪ Mathematics Subject GRE Workshop (UCSD) Mar 2019 ▪ Homotopy and the Hopf Fibration (UCSD) Jun 2018 ▪ Spectral Sequences and Higher Homotopy Groups of Spheres (Poster) <i>UC San Diego Undergraduate Research Symposium</i> May 2018 ▪ Topological Fixed Point Theorems (UCSD) Mar 2018 ▪ Homology and The Snake Lemma (UCSD) Nov 2017 ▪ Algebraic Geometry: A Historical Primer (UCSD) Oct 2017 ▪ Introduction to Category Theory, Part 3 (UCSD) Jan 2017 ▪ Introduction to Category Theory, Part 2 (UCSD) Nov 2016 ▪ Introduction to Category Theory, Part 1 (UCSD) Oct 2016 ▪ Discrete Mathematics: Graphs and Trees (UCSD) May 2014
WORKSHOPS	<ul style="list-style-type: none"> ▪ Introduction to Functional Programming (Organizer/Speaker, UCSD) Oct 2017 ▪ Intermediate \LaTeX(Organizer/Speaker, UCSD) May 2017 ▪ Introduction to \LaTeX(Organizer/Speaker, UCSD) Apr 2017 ▪ Intermediate \LaTeX(Organizer/Speaker, UCSD) Feb 2017 ▪ Organizing Research Projects with \LaTeX(Organizer/Speaker, UCSD) Jan 2017 ▪ Introduction to \LaTeX(Organizer/Speaker, UCSD) Nov 2016 ▪ Haskell for Mathematicians (Organizer/Speaker, UCSD) Oct 2016
WORK EXPERIENCE	<p>Retail Scientifics, San Diego, CA Jan 2016 – Aug 2019</p> <ul style="list-style-type: none"> ▪ Data Scientist & Full Stack Engineer <ul style="list-style-type: none"> • API development for real-time predictive modeling, time-series forecasting, and machine learning. <p>Google Summer of Code, Berkeley, CA Apr 2015 – Aug 2015</p> <ul style="list-style-type: none"> ▪ Student Developer <ul style="list-style-type: none"> • Contributed Haskell code to the open source project Hackage. <p>Shutterfly, Santa Clara, CA Jun 2014 – Jan 2015</p> <ul style="list-style-type: none"> ▪ Software Engineer, Intern/Contractor <ul style="list-style-type: none"> • Developed server-side OpenGL 3D graphics engine and associated mathematical libraries.
CONFERENCES	<ul style="list-style-type: none"> ▪ Graduate Online Anything Topology Conference (GOATS) (Organizer, 3 iterations) Summer 2020
MISC.	<ul style="list-style-type: none"> ▪ List of coursework: https://dzackgarza.com/activities/coursework ▪ Expository writing and open-source collection of course notes in \LaTeX: https://dzackgarza.com/writing/
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