D. Zack Garza

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EDUCATION

University of Georgia, Aug 2019 – Present
- Ph.D. in Mathematics *(In Progress)*

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 ($\times 2$) — 2019 – 2021
- UC San Diego Academic Enrichment Program Undergraduate Research Scholarship *(Declined)* — 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
- (*Planned*) 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

Misc.
- Recitation Leader: Calculus I (Math 2200, UGA) — Fall 2019
- Graduate Mathematics Assistant, Tutoring Program (UGA) — Fall 2019 – Spring 2020
- 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
- Tutoring — 2014 – Present
  - Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability, Combinatorics

President, Society of Undergraduate Mathematics Students (UCSD) 2016 – 2018

Officer, Mathematics Club (Sierra College) 2013 – 2014

SELECTED TALKS & WORKSHOPS

- 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
- 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
- Mathematics Subject GRE Workshop (UCSD) Mar 2019
- Homotopy and the Hopf Fibration (UCSD) Jun 2018
- Spectral Sequences and Higher Homotopy Groups of Spheres (Poster) *UC San Diego Undergraduate Research Symposium* 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 Functional Programming (UCSD) Oct 2017
- Intermediate LaTeX(UCSD) May 2017
- Introduction to LaTeX(UCSD) Apr 2017
- Intermediate LaTeX(UCSD) Feb 2017
- Organizing Research Projects with LaTeX(UCSD) Jan 2017
- Introduction to Category Theory, Part 3 (UCSD) Jan 2017

- Introduction to LaTeX(UCSD) Nov 2016
- Introduction to Category Theory, Part 2 (UCSD) Nov 2016
- Introduction to Category Theory, Part 1 (UCSD) Oct 2016
- Haskell for Mathematicians (UCSD) Oct 2016
- Discrete Mathematics: Graphs and Trees (UCSD) May 2014

WORK EXPERIENCE

Retail Scientifics, San Diego, CA Jan 2016 – Aug 2019

- Data Scientist & Full Stack Engineer
  - API development for real-time predictive modeling, time-series forecasting, and machine learning.

Google Summer of Code, Berkeley, CA Apr 2015 – Aug 2015

- Student Developer
  - Contributed Haskell code to the open source project Hackage.

Shutterfly, Santa Clara, CA Jun 2014 – Jan 2015

- Software Engineer, Intern/Contractor
  - Developed server-side OpenGL 3D graphics engine and associated mathematical libraries.

CONFERENCES

- Graduate Online Anything Topology Conference (GOATS) (Organizer, 3 iterations) Summer 2020

MISC.

- 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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